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ABSTRACT

To determine the value of summer programs in relation to the total programs of vocational agriculture in Iowa, this study, representing 80 percent of the vocational agriculture departments in the state, utilized the data from completed annual reports and the monthly activity reports. The summer programs and total programs were rated by four agricultural education consultants in the Iowa Department of Public Instruction. The summer program of vocational agriculture is an important and integral phase of a total program because seasonal educational activities and techniques may be utilized. Also, provision is made for the opportunity to use more fully the educational and community resources on a 12-month basis. Departments with highly rated programs conducted at least twice as many instructional field trips and tours as did departments with lower rated programs. This M.S. thesis was submitted to Iowa State University. (GB)

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RELATION OF SUMMER PROGRAMS TO TOTAL PROGRAMS OF VOCATIONAL AGRICULTURE IN IOWA

by

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INTRODUCTION

The passage of the Smith-Hughes Act in 1917 created a vocational education program for agriculture, which was unique compared to other educational programs of that time.

The Act provided for year around employment of the vocational agriculture instructor to provide individualized on-the-farm instruction related to real farm problems. Vocational agriculture instructors in Iowa are hired on a twelve-month contract in accordance with the State Plan for Vocational Education.

The business of agriculture by nature is dependent on a continuous year around program if it is to be truly vocational in nature so as to serve the educational needs of farmers and students at crucial periods during the production of crops and livestock. Throughout the entire vocational agriculture program, teachers emphasize the use of improved practices in agricultural production. They also teach around job skills and competencies needed in the agriculturally related occupations.

Many of the competency studies recently conducted by researchers at Iowa State University have attempted to define the skills and competencies needed by employees in various agriculturally related occupations. Some studies have defined those skills and competencies needed and possessed by farmers in various phases of agriculture production and management on farms.

Abel (1) defined competencies needed by farmers in forage crop production and utilization. A group of outstanding farmers was selected and also a random sample group to respond to the questionnaires. Both sample groups had higher over-all scores for competence needed than for competence possessed.

Young farmers selected by Iowa Jaycees for their outstanding young farmer contest were used by Bennett (4) to determine competence in soil management and fertilizer use. Bennett observed that the need for additional training for present farm operators is evident, when the outstanding farmer group that was studied indicated a need for more competence than they possessed in 44 of the 46 competencies that were identified and evaluated.

Similar results were found in a large majority of the studies. Respondents indicated a need for more competence than they possessed in a majority of the skills outlined as needed for success in farming or the agricultural occupation concerned. This has implications for vocational agriculture instructors to provide educational group meetings and more individualized on-farm instruction to help farmers further develop skills and competencies needed. Much of this instruction can take place during the summer months when the teacher's time is less rigidly scheduled than during the school year. This portion of the year provides a change of pace for the instructor and allows a flexibility to schedule timely large and small group meetings or individualized instruction in a practical setting upon short notice. These meetings may include tours, field trips, or demonstration plot meetings. The teacher may increase the amount of summer time used for young farmer and adult farmer education compared to that devoted to day school students, because he is not tied down to a classroom schedule.

The successful vocational agriculture teacher schedules and uses his time in the summer as carefully as he does during the regular school term, even though it is less highly structured.

Twenty-five percent of the vocational agriculture teacher's professional contract time each year is spent during the summer months. Some educators and administrators have questioned the value and effectiveness of the use of this time. The organization and use of time is left primarily up to the vocational agriculture teacher, to develop an educational program in agriculture to fit the local community needs.

Recent reorganization in the Washington Office of Education as well as several state departments of education, including the Vocational Branch in the State Department of Public Instruction in Iowa, has implied a need for deemphasis of agricultural education in favor of increased emphasis in other occupational areas.

During this period, questions were raised by some educators regarding the importance of continuing the present emphasis on summer programs of vocational agriculture. It is being suggested that other areas of education also develop summer programs to better serve the needs of many youth and adults who could benefit from such a program. It seems inconsistent then, that vocational agriculture should de-emphasize the summer program if other segments of the educational complex should move toward utilizing the summer program techniques and approach, which have been proven so successful in vocational agriculture programs.

It is possible that emphasis on agricultural education could be maintained or increased while at the same time increasing emphasis on vocational education in other occupational areas where it is needed.

Agriculture is by far the largest industry in the Nation. In Iowa at least 40 percent of the labor force is directly dependent on agriculture. There were about 141,000 farms in Iowa averaging 240 acres in size as of January 1, 1969, according to the 1968 Iowa Annual Farm Census, compiled by the Iowa Department of Agriculture (19). New wealth amounting to 3.8 billion dollars gross farm income was created and fed into the Iowa economy in 1968, by these farms. The trend to fewer but larger farms has continued the past few years at the rate of about 2 to 3 percent decline per year. Population figures as of January 1, 1968, showed 542,739 people living on farms. Agricultural employment figures indicate about 1-1/4 family workers per farm for a total of 176,250. There were about 29,000 hired workers for a total of 205,250 farm production workers. There were also 260,000 non-farm agricultural workers for a total agricultural employment in Iowa of 465,250. Total Iowa employment was 1,176,400. These trends indicate a need for expansion of many vocational agriculture programs to offer more agribusiness training as well as production agriculture to serve the needs and interests of students desiring such training. It is apparent that agricultural education should continue to play an important role in Iowa schools in helping to supply the annual replacement needs for farmers and agribusiness workers in the Iowa economy as technology and specialization in agriculture continues to increse. Presently, 231 of the 453 secondary schools in Iowa offer vocational agriculture. There are also 26 specialized post-secondary agriculture programs in the 15 area vocational technical schools and community colleges in Iowa helping to supply the agricultural manpower needs of the state.

An article entitled, "Something to Fight For," by Krebs (21, p. 243), stated that,

> The summer employment of teachers of vocational agriculture is one of the most vulnerable parts of the educational program. It is especially important, therefore, that we take positive action to make certain that what we do in the summer is of sufficient value to the public to make the public willing to fight actively to keep it.

Some critics of vocational agriculture have attacked the summer program of the vocational agriculture instructor as being the weakest link of the program when, one acquainted with the profession would easily assert that this phase of the program can, in reality, be the strongest and most effective in many ways.

Why is the summer program so vulnerable and sometimes criticized? What constitutes a strong summer program, and how does it relate to the total program of vocational agriculture?

It is hoped this study may shed some light on these questions, and show the importance of a need for continued emphasis on summer programs. Recommendations may be developed from the results which will emphasize techniques and criteria to further strengthen summer programs of vocational agriculture. Many of these techniques could well prove beneficial to other phases of vocational education.

Considering the concerns and questions posed, this study was designed to attain the following objectives:

1. To determine the relation between the effectiveness of summer programs of vocational agriculture and the effectiveness of total programs of vocational agriculture in Iowa.

2. To determine whether the summer vocational agriculture program rating is positively affected by the number of:
    a. day school students enrolled
    b. adult farmers enrolled
    c. supervisory visits per student per year
    d. supervisory visits during the summer of 1969

e. miles traveled in vocational agricultural work during fiscal year 1969

f. years teaching experience

g. years of tenure in present position

h. students placed for agribusiness employment experience

i. students exhibiting at shows

j. students exhibiting at the Iowa State Fair

k. students trained and entering speaking contests

l. judging teams trained

m. publicity items including newspaper, radio and television

n. instructional class field trips conducted

o. Iowa Farmers at the 1969 Iowa FFA Convention.

3. To determine whether the summer vocational agriculture program rating was related to the extent the department was a full-time department.

4. To determine whether the summer vocational agriculture program rating was related to the dollars of labor income from supervised farming and employment experience programs.

REVIEW OF LITERATURE

The review of literature was limited primarily to the last ten years. It was felt that literature published before 1959 would be somewhat outdated and consequently was not included in this study. The primary sources of research dealing specifically with the subject were found to be the "Agricultural Education Magazine" and "Summaries of Studies in Agricultural Education," a publication prepared and published by the Research Committee of the Agricultural Education Section, American Vocational Association.

The literature reviewed regarding summer programs of vocational agriculture revealed that many studies have surveyed opinions, attitudes and perceptions of administrators, teachers and parents concerning vocational agriculture and the summer program. Some have evaluated the use of teacher time during the school year and the summer months. Only one of the studies reviewed, a study by Koene (20) of Wisconsin, evaluated the summer program and its relationship to the total vocational agriculture program.

The reviews, therefore, will be discussed in the following three categories: opinions, use of time, and general topics.

Opinions

An evaluation of summer programs of vocational agriculture should well consider opinions of people involved in varying degrees of relationship to the program.

Vocational agriculture teachers are no doubt closest to all phases of the program. A large majority of the 112 Nebraska vocational agriculture teachers surveyed by Holmberg (17) indicated high satisfaction with the following factors in teaching vocational agriculture. Opportunity for working with rural people and the social and community acceptance experienced by vocational agriculture teachers in relation to the program rated high. Also valued by these instructors was the freedom to demonstrate initiative and creativeness. Twelve-month employment ranked high supporting the importance of the summer program in vocational agriculture. McComas (24) found that teacher effectiveness was positively related to job satisfaction. His data revealed that teachers rated as most effective when compared with those rated as least effective by administrators were:

1. More active in community affairs
2. Conducted more classes for young and adult farmers
3. Earned more hours beyond their highest degree
4. Taught in schools having slightly larger vocational agriculture enrollments.

These factors would also indicate a more active summer program.

Further support for the value of the summer program was evidenced by 100 superintendents, 100 principals, and 100 vocational agriculture instructors surveyed by Clary (8). All three groups felt the public schools have a responsibility for providing educational opportunities for all persons who need, desire, and can profit by such education and that public school education should be extended beyond the high school level. All three groups agreed that vocational agriculture teachers' schedules should provide time for work with adults. The summer program provides non-structured time to allow much flexibility in working individually and with groups of adults as well as day school students and FFA activities. This non-structured time puts the burden of setting priorities and organizing a schedule on the vocational agriculture teacher. A poor organizer may do a better job during the structured school year than during the summer.

Many farm visits are made by the instructor to provide individualized instruction and motivation to set successful goals. Parents' appraisal of vocational agriculture programs in an Ohio study by Hedges (14), listed four as the average number of farm visits a teacher should make to the boy's home during the year. They added, however, that visits should be made whenever a need exists.

The majority of administrators in an Indiana study felt that the vocational agriculture instructor should make as many as three supervisory farm visits per student per year according to Bentley and Woerdehoff (5). Only two-thirds of the administrators, however, considered the time needs for making farm visits as part of the teacher's work load.

Mattes (23) surveyed 234 Iowa superintendents' attitudes concerning vocational agriculture in 1966. Ninety-eight percent of the superintendents felt the teacher should visit his students on their farms to supervise student project work. Approximately two-thirds of them felt the teacher should make six farm visits per student per year. The time needed for making farm visits to students should be recognized as part of the teacher's work load according to 90 percent of the superintendents. Twenty-five percent more Iowa administrators felt farm visit time was a part of the vocational agriculture teacher's work load than did the Indiana administrators. In Iowa, adult farmer classes, summer programs and the twelve-month contract were thought to be necessary by most administrators. They had a strong negative attitude toward part-time farming and other employment by the teachers. They also opposed the idea of all education for adult farmers and young farmers being provided by agencies outside the public school.

Opinions regarding the minimum number of farm visits varies among studies from 3 to 6 per year per student.

Tennessee administrators, according to Snodderly (30), thought rather highly of their vocational agriculture programs and indicated that it is a necessary part of their curriculum. These administrators, however, placed less emphasis on the value of the young and adult farmer programs than did the instructors.

Wisconsin administrators reactions were very favorable, Mortimer (26) found, to the conducting of adult and young farmer classes and they were strong advocates of FFA. These 216 principals also felt the individualized instruction and follow-up should be carried to the farm with more supervised visits and well planned field trips. A sizeable percentage of them, however, questioned full-time summer employment.

High school principals evaluated local programs of vocational agriculture in West Virginia in cooperation with Hardway (12). The principals who aided in establishing the criteria felt that all of the areas were important, however, regarded the instructional activities as the most important element and the adult and young farmer programs as the least important.

Recommendations from the Hardway (12) study were that more effective use of summer employment and on-farm instruction should be made by teachers. There was also a need to increase the number of young and adult farmer programs available.

Several studies, including one by Webb (33), revealed a weakness of some instructors in not utilizing their time during summer months to the best advantage of the program. A large majority of administrators, however, felt the summer program is a necessary part of the instruction and that it justifies the 12 months employment.

Maryland administrators, surveyed by Miller (25), echoed sentiments of those polled in other states, that the objective should be, "training for useful employment in farming or related occupations and not just farming alone." The majority did not consider that the percentage entering farming alone was important to justify the program.

Opinions of Kansas school men, who oversee successful vocational agriculture departments, were summarized by Agan (2). Their opinions reflected many which were noted in other studies and may serve as a capsule summary of principles found to be prevalent in successful departments.

1. Supervised farming and experience programs are basic and important for all students.
2. On-the-farm instruction is essential.
3. Twelve-month employment and the summer program are necessary.
4. FFA is an integral part of vocational agriculture.
5. Adult and young farmer classes are an integral part of the total community vocational education program in agriculture.
6. Field studies, demonstration plots, and field trips are essential to practical related instruction.
7. The vocational agriculture teachers are a part of the total education staff for the school and community with equal rights and responsibilities.

Eight summer activities were ranked from most important to least important, for Walker (32), by 200 superintendents and principals in Minnesota.

They felt that individual on farm instruction was the most important activity, whereas summer school attendance was ranked least important. Other activities ranked important were supervising trial plots, school farms or other teaching demonstrations, revising lesson plans, preparing teaching aids and department maintenance and administration. Activities felt to be of less importance were conducting tours and meetings, summer conferences and county and state fair participation.

Appraisals by Ohio administrators and board presidents, surveyed by Guiler (10), showed that 44 percent of the administrators felt the summer program was of "considerable" or "great" importance, whereas over half of them believed the summer activities of vocational agriculture to be of "some" or "little" importance.

More board presidents, 62 percent, felt the summer program was of "considerable" or "great" importance, while 31 percent rated it "some" or "little." The summary also showed that 58 percent of the presidents and 50 percent of the administrators felt summer program activities to be about the same importance as those activities during the school year.

Citizens in the Church Hill, Tennessee school district had but "little" understanding of the vocational agriculture program in the local school, according to Hinton (16). Those interviewed answered correctly only 45 percent of the possible correct answers on the questionnaire. A continuous public relations program is needed regarding vocational agriculture, especially the value of and need for a summer program.

Time Use

The importance of the summer program has been well established through the years. Researchers found some concerns regarding effective use of summer time by the vocational agriculture instructor. If a teacher considers the one quarter of his annual salary supporting the summer program, he should carefully analyze the educational return to the community for their investment in the summer program. This concern has evidently been widespread enough to motivate a number of researchers to investigate time use of teachers during the summer months.

Separate investigations conducted by Bruning (7) in South Dakota and Herndon (15) in Colorado found that teachers devote an average of about 59 hours per week to professional agricultural activities during the school year.

Estimates made by Michigan teachers at the beginning of a study by Haslick and Langdon (13) showed they felt they should devote 43 percent of their summer time to on farm visits. This compared to 28 percent of the 43 hours per week spent on the job. It was found they actually spent an average of 43 hours per week during the summer months of which only 28 percent was devoted to supervisory on-farm visits. It was noted from studies reviewed, from experience and personal observation, that many teachers tend to spend fewer hours per week on the job during the summer than during the school year.

Kansas teachers developed a suggested summer program of activities, according to Bradley (6), which indicated that they believed nearly one-third of their summer should be spent in planning for the coming year. Supervision of farming programs and professional improvement tied for second place.

Bradley suggested that supervised farming programs should consume about one-fourth of a teacher's summer time with planning activities taking about one-fifth. Out of school programs, professional improvement and community services are activities which should utilize about two-fifths of the summer time. Teachers should spend no more than one-fifth of their summer time on FFA, publicity and records and reports combined, according to Bradley. With 40 percent of teachers' time devoted to supervising farming programs and out of school programs, Bradley felt efforts to accomplish vocational agriculture objectives would be strengthened.

The most extensive study reviewed by the author was titled, "The Use of Professional Time During the Summer Months by Teachers of Vocational Agriculture in Ohio," by Guiler (10).

A very detailed distribution of time was provided by Guiler (10, p. 150) showing the following use made of the 52.5 average hours per week spent by Ohio teachers during the summer of 1959.

In-service education	18.0%
Future Farmers of America	17.0%
Vacation	15.6%

Instruction on-farm (high school students)	11.7%
Fairs (county and state)	8.8%
Physical facilities	7.7%
Preparation for teaching	4.8%
Office routine	4.2%
Adult farmer program	2.9%
Community service and public relations	2.8%
Individual conferences (off-farm)	2.1%
Young farmer program	1.5%
Departmental program planning	1.3%
Miscellaneous	1.6%

The 18 percent of time spent on in-service education may seem high, however, with rapidly changing technology the teacher must continually improve professionally to keep pace with agriculture, thereby keeping his teaching current and practical.

The 60 more competent teachers devoted one-half day more per month to their job than did the 260 less competent fellow teachers. The top 60 also spent more time on in-service education, high school on-farm visits, and on adult and young farmer programs.

The other 260 devoted more time to FFA, office routine, physical facilities and vacation.

It was concluded by Guiler (10) that the demand for teacher time during the summer months requires a careful budget of time. He felt greater emphasis should be given to teachers' appraisal of professional time use during the summer, a daily plan of activities submitted to administrators and improved communications between the teacher and administrators.

A Wisconsin study of 130 instructors by Koene (20) in 1963 showed that 28.2 days were spent on farm visits during the summer, which was equivalent to 50 percent of the total days spent on the job. This was the highest percentage found in the literature reviewed.

Other Factors

Most vocational agriculture teachers regard student recruitment as a valuable and necessary summer activity. Magisos (22), in identifying factors influencing first enrollment of students, found that 215 first year students surveyed were especially attracted by facilities. The most interesting features influencing the students were the study of livestock and shop practices. The family, the agriculture teacher and older boys enrolled in vocational agriculture exerted the most personal influence on the decision to enroll. The type of events ranked first and found to be most influential were fairs and shows.

Recently, some people have questioned the real value of fairs as an educational technique for teaching livestock selection. As the livestock industry and consumer demand changes possibly some shows tend to lag behind and not keep pace with new developments in livestock evaluation and selection. It appears that indirect and motivational values accrue through competition at fairs and shows which cannot be measured directly by economics.

An Oklahoma researcher, Baker (3), pursued a study comparing vocational agriculture departments with students who exhibited livestock on the state level to those who did not. Evidence presented in that pursuit clearly indicated that there was a desirable relationship between certain characteristics of an adequate program of vocational agriculture and the amount of participation of a department in fairs and livestock shows.

Those departments which rated high in exhibiting livestock were significantly ahead of the low group in:

1. gold, silver, and participating national chapter ratings,
2. state and American Farmer degrees, and
3. number of boys holding offices above the county level.

There was also a significant difference in favor of the high group with respect to:

1. investment in the farming program,
2. investment in farm shop equipment,
3. labor income from the farming program, and
4. percentage of graduates in professional agriculture.

There was no significant difference between the two groups in:

1. placement of graduates in farming and related occupations,
2. scholarship,
3. dropouts from vocational agriculture,
4. tenure of the instructors, and

5. number of standard and superior awards.

The writer concluded that teachers and their students are justified in participating in fairs and shows if they need these experiences as a means to an end but not if the participation is an end in itself.

Minnesota vocational agriculture departments with low enrollments in 1958-59 were studied by Hanson (11). He found that low-enrollment level departments have students with higher net worth and more working capital than higher enrollment levels. Schools reporting high student net worth values also reported more farm instruction calls per student than the schools having low student net worth values.

The relationship that exists between the number of farm visits made per boy by the instructor and the students' labor income was examined by Schmidt (29). In the 250 Iowa departments studied he found that labor income per student increased with increased number of farm visits per student. The data indicated that as department size increased, farm visits per student decreased and labor income increased very slightly. Departments with the highest labor income had the most farm visits per student and the lowest labor income groups had the least farm visits. The top 20 percent of departments, based on farm visits, had over 1.5 times the labor income of the lowest 20 percent of departments based on farm visits.

State consultants and supervisors for years have stressed the importance of farm visits for successful vocational agriculture programs to teachers through in-service training and conferences.

Instructors rated highest by supervisory personnel spent more time making on-farm visits than instructors who were rated lower according to Koene (20).

Professional improvement activities had a positive relationship to the supervisors ratings of the instructors and the extensiveness of the summer program conducted. There were several weeks when those instructors attending summer school were unable to pursue an active summer program. This study, however, indicated that instructors who attended summer school conducted a more vigorous overall program than was carried on by instructors not participating in professional improvement endeavors.

Other findings revealed that ratings increased as the number of years of teaching experience and departmental enrollments increased.

A special problem study of the summer program of 19 central Iowa instructors was conducted by Hoskey and Blake (18, pp. 301-302), to determine what activities or tasks were of the most importance. These instructors were personally contacted and completed a prepared questionnaire indicating on a ten point scale the relative amount of importance placed upon selected activities.

A summary of their responses indicated the highest importance was placed on supervised farming programs of day school students. Other activities of higher importance were planning next year's program, public relations, FFA meetings and contacting potential students. Activities of lower importance were felt to be graduate work, improving classroom and shop facilities, summer conferences, FFA educational tours and out of school programs.

Hoskey and Blake (18, pp. 301-302) stated that,

> As can be seen the actual on-the-farm visits of day students rated highest among the summer activities. These findings are in accordance with most recommendations of vocational agriculture leaders and the State Plan. However, this same activity had a range of 7-10 and it was expressed by some of the instructors that on-the-farm visits for day students were not as important in the summer as were visits to the adults and young farmers during the summer. Even though the on-farm-visits of the day students were found to be very important, the activities of the adult and young farmer classes and on-farm-visits for adults and young farmers were also found to be very important since many production problems arise during the summer. Some instructors said, "It also helps to have the backing of these adults and young farmers in the summer as well as in the winter."

It was found in this study that only 52.6 percent of the instructors prepared a regular planning form with a schedule of activities prior to doing the activities. When asked if they had regular office hours during the summer, only 42.2 percent replied yes.

In Illinois, Phipps (28, p. 244) observed that only a few schools conduct their young and adult farmer program on a year-round basis so that some of the young and adult class meetings are held during the summer. He says,

> Those schools that have planned their young and adult farmer courses on a year-round basis have proved that it is possible to get attendance at summer class meetings. They have also proved that summer class meetings in a course have many advantages over class sessions during the other seasons of the year. Some advantages are:
>
> 1. The teacher has more time for preparation.
> 2. The psychological effect on the community. When farmers attend summer class meetings, they have evidence that the teacher is on the job and earning his salary.
> 3. They provide for use of real objects in real life settings for visual presentations.

Well (34) surveyed 25 farmers who had attended young and adult farmer classes in the Medina, North Dakota Public School District. He found that they favored holding adult farmer and young farmer classes throughout the year excepting one or two months in the summer.

A summary of opinionnaires returned to Welsh (35) by 122 Ohio farmers showed that very few farmers desired meetings during the summer months. November through March were the months most favored for meetings. The farmers generally wanted 15 or more one and one-half hour meetings annually. They listed teaching methods found to be particularly desirable for use in adult farmer programs as follows: tours and field trips (2 per year); demonstrations in the classroom and on the farm; three or four visits to each member's farm annually for on-the-farm instruction by the instructor; group discussions; and the use of outside speakers and specialists. Outside speakers were given a high rating and were desired by the majority of farmers for 50 percent or more of the meetings.

Although few farmers desired meetings during the summer months, it appears many of the desirable teaching methods listed would be most effectively conducted during the summer.

The most valuable benefits received from the meetings according to the farmers surveyed by Welsh (35) were learning new methods, changes and trends in farming, and learning timely information that could be used immediately on the farm.

In an Ohio survey, Guiler (9), asked 35 beginning teachers of vocational agriculture to record their use of professional time during July and August of 1964.

A summary of their responses indicated that they spent 34 percent of their time on farms, 20 percent on FFA activities, 18 percent in the department, planning programs and working on facilities, 16 percent on in-service education and 11 percent on communications.

Guiler felt more time than the three days allotted by beginners should be spent with adults and young farmers. He was surprised to find that they devoted 34 percent of July and August to on-farm instructional visits. This was a greater amount than experienced teachers devoted to the same area as found in previous studies.

It was Guiler's opinion that the time spent at the inevitable county and state fairs can be justified if individual student instruction prevails. In some cases the teacher becomes only a spectator and too little teaching is done. Five days of the teacher's professional time, as devoted by the beginners, are hard to justify.

In-service education should be accepted and recognized as an essential and integral part of teacher education according to Guiler. The four-year college program cannot adequately prepare prospective teachers for the profession.

He (9, p. 313) stated that

> During July and August beginning teachers often spend an excessive number of days in the classroom and shop working on physical facilities. The filing cabinets, tools, books, bulletins, and equipment are all important but certainly deserve less professional time than is normally devoted to this area. Our job as educators and leaders in a rural community is not to assume what might be classified as janitorial activities. Our job is to develop understanding, appreciation, and conviction that vocational agriculture has a purpose in the community. Such activities can wait until school begins while others will not.

Communications activities are important in involving administrators and key resource people in the community to help plan a program to meet the needs of students. "Beginning teachers must be cognizant of and use this advantage they have to secure the support needed in order to conduct an effective program," Guiler concluded.

One of the most comprehensive articles reviewed pertaining to planning summer programs was published in the May 1961 issue of the Agricultural Education Magazine. The article authored by Teske and Kiltz (31, p. 245) enumerated tips for planning a summer program of work for vocational agriculture.

They conducted a series of 12 conferences in each of the 12 vocational agriculture districts in Indiana in 1958-59. The purpose was to develop mutual understandings between administrators and teachers concerning various aspects of the summer activities of vocational agriculture teachers. A total of 263 vocational agriculture teachers and 130 superintendents and principals attended the meetings. Conclusions and agreements reached were as follows:

1. A plan should be developed showing proposed activities for the summer months and the amount of time in days allotted for each activity. The conferees recognized that many activities cannot be anticipated and programmed in advance so the plan must be flexible.

2. One full day per week and approximately one hour per day for other days of the week should be scheduled for office time.

3. Vocational agriculture instructors should keep administrators informed with an activity schedule submitted weekly.

4. Farm visits are of major importance. A minimum of one and preferably three farm visits per day school student during the summer is recommended.

5. The vocational agriculture instructor is the key public relations representative of the school. He should conduct himself in a manner that the rural clientele will regard him as the community's professional agriculture leader and adviser.

6. Professional improvement through summer conferences, and summer school, when time is available, is important. Field days, workshops, and tours are also valuable activities.

7. As a representative of the school system, the vocational agriculture instructor's guidance and counseling services should be in terms of the entire school program, not just vocational agriculture.

8. The vocational agriculture instructor as a professional agriculture educator should cooperate with other agricultural and community agencies. The vocational agriculture instructor is not subordinate to any other professional agriculture worker servicing the school, but is a cooperator.

9. Group activities which are important during the summer include regular FFA meetings, adult and young farmer monthly meetings, advisory council meetings, and timely tours and field days for instructional purposes.

The conferees concluded that activities in a quality summer program of work are many and of vital importance to the total program. The budgeting of time is a prime necessity in order to accomplish the essentials of a quality program.

A statement by Phipps (27, pp. 93-94) in his Handbook on Teaching Vocational Agriculture, provides an appropriate summary to this literature review. He stated that,

> A teacher of vocational agriculture is employed for twelve months because of the need for instruction the year-round. The summer program is an important phase of a program in vocational agriculture. It offers many opportunities for an instructor to do an effective job of supervision and teaching on the farm. Every teacher, with the help of others, should develop a list of the activities he plans for the summer and allot time for each. A copy of this list should be given to the advisory council, the school board, the superintendent, the state supervisor, and those who helped to develop the summer plans.

Effective summer time use is a concern of many people regarding the vocational agriculture program in the local community. Planning and allotting time on a priority basis to the most important activities affecting the program is necessary for a strong program which will secure the respect of the students, farmers and administrators.

Opinions varied greatly among people depending on the degree of participation, involvement or familiarity with summer vocational agriculture programs.

Probably the most important educational technique referred to by a high percentage of the studies was the farm visit. Field trips, first hand observation and carrying learning to the doing stage were also important techniques in agricultural education.

METHOD OF PROCEDURE

Selection of Sample

All vocational agriculture departments in secondary schools in Iowa, where no teacher change took place during the summer of 1969, were used for this study. This represented 185 of 231, or 80 percent of the departments in the state. The only exception was where only one of the teachers in a multiple teacher department left. It was felt there was enough program continuity where one of the teachers remained for the data to reflect accurately the activities of the summer program in relation to the total departmental program.

Obtainment of Data

The data for this investigation were secured from reports completed by vocational agriculture instructors and sent to the Iowa Department of Public Instruction, Des Moines, Iowa. Reports used were the Annual Vocational Agriculture Reports (A-5), and the monthly Summer Activity Reports (A-23). It is assumed all data submitted was honest and accurate in summarizing the activities of the department for the year.

An evaluation and rating of the summer programs and the overall programs of vocational agriculture departments into equal quintile groupings was completed by the four agricultural education consultants in the Department of Public Instruction. The consultants, including the former chief of agricultural education, had a combined total of 61 years of vocational agriculture department supervision experience.

Program evaluations considering the adopted criteria were made using a five point rating scale as follows:

5 - The provisions or conditions were present and functioning to the extent found in approximately the best 20 percent of the vocational agriculture departments.

4 - The provisions or conditions were present and functioning to the extent found in approximately the next 20 percent of the vocational agriculture departments.

3 - The provisions or conditions were present and functioning to the extent found in approximately the middle 20 percent of vocational agriculture departments.

2 - The provisions or conditions were present and functioning to the extent found in approximately the next 20 percent of vocational agriculture departments.

1 - The provisions or conditions were present and functioning to the extent found in approximately the lowest 20 percent of vocational agriculture departments.

Criteria for rating summer vocational agriculture program effectiveness

1. The teacher planned and organized summer time use effectively.

2. The teacher placed major emphasis on supervised farming program and occupational experience program development through planned, individualized, on-farm instruction, employment experience followup, supervision, guidance and counseling.

3. The teacher planned and conducted individual and group instruction for adult farmers, young farmers and day school students on farms as well as in the classroom and agribusiness establishments.

4. The teacher kept the school administration and public adequately informed regarding the summer vocational agriculture program in the community.

5. The teacher continued to keep pace with technological progress and change by professional improvement through attendance at the summer vocational agriculture teachers conference, workshops, off-campus courses and summer school attendance as permitted by the Iowa State Plan for Vocational Education.

6. The teacher had a well balanced summer program of activities including on-farm and off-farm occupational supervisory visits, FFA activities, adult and young farmer instruction, community services, department maintenance, program planning and professional improvement.

Criteria for rating overall vocational agriculture program effectiveness

1. The teacher cooperated with the administration.

2. The teacher effectively organized facilities and teaching, adapting to the needs of students.

3. The teacher cooperated with students, parents and employers in developing supervised farming and occupational experience programs in agriculture.

4. The teacher motivated and advised FFA members to conduct a strong active chapter program of work, which was in evidence.

5. The teacher-student rapport observed indicated a compatibility providing for effective communications and teaching.

6. The teacher was an effective instructor in the adult and young farmer programs and had respect as an agricultural leader in the community.

7. The teacher made effective use of advisory committees.

8. The teacher was progressive, kept abreast of changing technology and incorporated it into his teaching to meet changing needs, especially in the agriculturally related occupations.

9. The teacher applied his abilities in guidance and counseling to all his students.

10. The teacher made teaching practical and related through effective use of community resources such as field

trips, tours, employment centers and demonstration plots.

Processing of Data

The data obtained were recorded on code sheets. The information was transferred to International Business Machines (IBM) cards.

The following null hypotheses were formulated and tested:

1. There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the quintile group rating of the effectiveness of total programs of vocational agriculture in Iowa.
2. There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and:
   - a. full time vocational agriculture departments
   - b. number of day school students enrolled
   - c. dollars labor income per student from supervised farming and agribusiness employment experience programs
   - d. number of supervisory farm visits made during the summer of 1969
   - e. number of years of teacher tenure in the present position
   - f. number of students who exhibited at shows
   - g. number of students trained and entering

speaking contests

h. number of newspaper articles relating to the program

i. number of weeks the teacher attended summer school

j. number of instructional class field trips conducted

k. number of Iowa Farmer degrees received at the 1969 Iowa FFA Leadership Conference.

A correlation matrix was run which included the following variables:

1. summer program rating
2. years of vocational agriculture teaching experience
3. years of tenure in present position
4. day school enrollment
5. adult farmer enrollment
6. farm visits made during fiscal year 1969
7. farm visits made during the summer of 1969
8. judging teams trained
9. students who entered speaking contests
10. students placed for agribusiness employment experience
11. dollars of labor income per student
12. full-time vocational agriculture department
13. students who exhibited at shows
14. students who exhibited at the Iowa state fair
15. students who attained the Iowa Farmer degree in FFA

16. educational field trips conducted
17. miles traveled in vocational agriculture work during fiscal year 1969
18. miles traveled in vocational agriculture work during the summer of 1969.

The chi square test was also used to test several of the hypotheses.

An analysis of variance was calculated and the Scheffé test used to test variables related to the summer program rating.

Definition of Terms

1. Vocational agriculture program - A four-year program of agricultural subjects in public secondary schools, with emphasis in the five major areas of animal science, crop and soil science, agricultural mechanics, farm business management, and off-farm agricultural occupations or agribusiness. The young and adult farmer programs are for out-of-school students and are an integral part of the vocational agriculture program in the local community school district.
2. Young farmers - Young men usually between the ages of 16 and 30 years, who are out of high school, and who are becoming established in farming, or in some instances in other agriculturally related occupations. These men are enrolled for part-time preparatory education in vocational agriculture.

3. Adult farmers - Adults who are presently established and engaged in farming or in some instances in other agriculturally related occupations. These men are enrolled for part-time supplemental education in vocational agriculture to maintain and up-date their competence in the farming business.
4. Future Farmers of America (FFA)- A non-secret, non-sectarian, non-political and voluntary organization for students enrolled in high school vocational agriculture classes. It is an integral part of vocational agriculture for leadership training.
5. Full-time department - A vocational agriculture department in which the instructor is assigned duties only in the field of agricultural education and does not teach general education courses.
6. Labor income - The dollars income reflecting income after all costs, except self labor. This includes management and labor return.
7. Supervised occupational experience - A planned educational program of experiences gained through employment in an agribusiness under the supervision of an employer and the teacher.
8. Supervised farming program - A planned program of experiences in agricultural production, supervised by the teacher, usually in cooperation with parents on the home farm. These experiences are gained through productive projects,

improvement projects and supplementary practices selected by the student and are an integral part of a vocational agriculture program.

9. Fiscal year 1969 - The year beginning July 1, 1968 and ending June 30, 1969. This represented a normal twelve-month contract year for vocational agriculture instructors in Iowa.

10. Summer program - The educational and service activities conducted by the vocational agriculture instructor during June, July and August of 1969, unless otherwise stated in the study.

11. Supervisory visits - Individual instructional and supervisory visits to students placed for employment experience in an agribusiness or on the farm. The term farm visits is often used synonymously with supervisory visits.

FINDINGS AND DISCUSSION

There were vocational agriculture departments in 235 (51.8 percent) of the 453 secondary public schools in Iowa during the 1968-69 school year. Data used in this study from reports submitted to the State Department of Public Instruction were obtained from the 185 vocational agriculture departments where no teacher change occurred during that school year or during the summer of 1969.

Vocational Agriculture Program Status

$\underline{Ho_1}$ - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and full-time vocational agriculture departments.

Data in Table 1 reveal that 153 (82.7 percent) of the 185 departments studied were full-time vocational agriculture departments in which the instructor devoted his professional effort entirely to agricultural education in the community. The remaining 32 departments (17.3 percent) were classified as part-time, which indicated the instructor had one or more non-vocational agriculture classes assigned as part of his teaching load.

It was noted that 17 (45.9 percent) of the 37 departments in which the summer programs were rated 1 were part-time departments, whereas only 2 (5.4 percent) of the departments with summer programs rated 5 were part-time departments.

Table 1. Summer program rating by vocational agriculture department status

Summer program rating	Number of departments	Full-time departments Total number	Full-time departments Percentage of rating	Part-time departments Total number	Part-time departments Percentage of rating
5	37	36	97.3	1	2.7
4	37	35	94.6	2	5.4
3	37	34	91.9	3	8.1
2	37	28	75.7	9	24.3
1	37	20	54.1	17	45.9
Total	185	153	82.7	32	17.3

The summer programs in 26 of the 32 part-time departments were rated in the bottom 40 percent, whereas only 3 were rated in the top 40 percent. Over 90 percent of the summer programs rated 3, 4 and 5 were full-time departments.

It appeared that teachers who chose to teach in a full-time department tended to develop the most effective summer programs as well as total programs of vocational agriculture.

Those who taught in part-time departments were not able to devote full time to the agricultural education program in the community. Since their time and effort was divided, fewer of them developed highly rated programs in vocational agriculture. The evidence presented appears to justify the recommendation that vocational agriculture instructors devote full time to agricultural education.

Data in Table 17 revealed a positive correlation (0.38) significant at the one percent level between the summer program rating and full-time vocational agriculture departments. The null hypothesis that there is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and full-time vocational agriculture departments was rejected.

Ho_2 - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of day school students enrolled.

It was noted from data in Table 2 that the mean enrollments in all categories in the departments in which the summer programs were rated 1 were lower than enrollments in departments with programs rated 2, 3, 4 or 5.

Table 2. Summer program rating by vocational agriculture department enrollments

Summer program rating	Number of departments	Mean number of students			
		Total department	Day school	Adult farmer	Young farmer
5	37	145.8	54.0	85.5	5.8
4	37	140.4	58.2	79.2	3.0
3	37	107.8	44.5	60.7	2.2
2	37	109.3	46.7	58.9	3.8
1	37	80.8	38.3	40.7	1.3
Total	185	116.8	48.3	65.0	3.2

Further indications in Table 2 were that as the summer program rating increased, day school and adult farmer enrollment also increased. Mean day school enrollment for departments with a summer program rating in the upper 40 percent was 56, whereas the lower 40 percent had a mean day school enrollment of 42.5. Mean adult farmer enrollment in departments with a summer program rating in the top 40 percent was about 82, whereas the lower 40 percent enrolled about 50 adult farmers.

This has implications as to why more of the lower ranked programs were in part-time departments. Either they were in smaller school districts where enrollment potential was limited or they did not attract enrollment because of the lack in quality and effectiveness of the program developed. Where this occurred, some administrators possibly justified teacher load by adding other teaching duties. This further divided teacher time and effort toward agricultural education which further weakened the total vocational agriculture program.

The computed F-value (8.65) from the Scheffé test for analysis of variance was found to be highly significant when compared to the table F-value (3.43) at the one percent level. The null hypothesis that there is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of day school students enrolled was rejected.

Ho_3 - *There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the quintile group rating of the effectiveness of total programs of vocational agriculture in Iowa.*

The ratings of programs by the vocational agriculture consultants in the State Department of Public Instruction, indicated a highly significant relationship between the summer program rating and the total program rating.

Data in Table 3 revealed that of the 37 departments which were rated 1 on summer program effectiveness, 33 (89.2 percent) were also rated 1 on total program effectiveness. Only four of the departments (10.8 percent) which were rated 1 on total program effectiveness were rated 2 on summer program effectiveness.

Twenty-seven (73 percent) of the 37 departments which were rated 5 on the summer program were also rated 5 on the total program. Ten departments (27 percent) which were rated 5 on the summer program dropped to a rating of 4 on total program effectiveness.

Comparison of the middle ratings (4, 3 and 2) with the top (5) or bottom (1) ratings showed more variation in spread. In those three groups, ratings of summer and total programs coincided within a range of about 55 to 60 percent. Nearly equal numbers of departments had total program effectiveness rated above and below the summer program rating.

Table 3. Vocational agriculture program rating

Total program rating	Summer program rating					Total number departments
	5	4	3	2	1	
5	27 73.0%	9 24.3%	1 2.7%	0	0	37 100%
4	10 27.0%	20 54.1%	5 13.5%	2 5.4%	0	37 100%
3	0	7 18.9%	21 56.8%	9 24.3%	0	37 100%
2		1 2.7%	10 27.0%	22 59.5%	4 10.8%	37 100%
1		0	0	4 10.8%	33 89.2%	37 100%
Total	37 100%	37 100%	37 100%	37 100%	37 100%	185

It appeared from the data in Table 3, that summer program effectiveness was a very reliable predictor of total program effectiveness.

It seemed to the author, that since the summer was fully devoted to agricultural education that more of the low rated total programs might have higher rated summer programs. The data did not support this assumption.

Inspection of data in Table 3 reveals a positive relationship between the summer and total program ratings. The rank order coefficient of correlation (0.99993) revealed a highly positive correlation, therefore the null hypothesis was rejected.

Summer Program of Vocational Agriculture

The summer program of vocational agriculture in Iowa has been an integral part of the total program since its inception. Several variables affecting summer programs were studied in relation to the rating.

An analysis of data in Table 4 indicates that in all contest categories the mean number of contestants increased as summer program rating increased, nearly doubling from a rating of 1 to a rating of 5.

Table 4. Summer program rating by the number of students entering vocational agriculture-FFA contests

Summer program rating	Number of departments	No. judging teams trained	No. students participating		
			Speaking contests	Other contests	Iowa Farmer degree
		Mean	Mean	Mean	Mean
5	37	4.7	31.4	36.2	2.0
4	37	4.8	24.8	24.9	1.2
3	37	4.8	19.9	22.1	0.8
2	37	3.8	16.8	16.2	0.7
1	37	2.6	13.7	14.0	0.3
Total mean		4.1	21.3	22.7	1.0

The mean number of students in speaking contests in the highly rated 40 percent of programs was 28.1, whereas the mean number in the lower rated 40 percent was 15.2. A similar relationship existed for other contests. The mean number of Iowa Farmer degrees received by students in departments with summer programs rated 5 was six times greater than the number awarded in departments with programs rated 1.

The number of judging teams trained had a positive relationship to the summer program rating as evidenced by data in Table 5.

Table 5. Summer program rating by the number of judging teams trained[a]

Number of judging teams trained	Summer program rating					Total number departments
	5	4	3	2	1	
0	1 2.8%	1 2.7%	3 8.3%	2 5.4%	4 10.8%	11 5.9%
1-2	9 25.0%	5 13.5%	8 22.2%	10 27.0%	13 35.2%	45 24.3%
3-4	11 30.6%	15 40.5%	9 25.0%	14 37.9%	14 37.9%	63 34.1%
5-6	9 25.0%	9 24.3%	8 22.2%	5 13.5%	5 13.5%	36 19.5%
7-14	6 16.6%	7 18.9%	8 22.2%	6 16.2%	1 2.7%	29 15.7%
Total	36	37	36	37	37	183

[a] Statistical analyses: computed chi-square value = 249.082, table value at the 5 percent level = 43.773, table value at the 1 percent level = 50.892.

Instructors in over two-fifths (42.4 percent) of the departments with summer programs rated in the top 40 percent trained 5 or more teams, whereas instructors in about one-fifth (22.9 percent) of departments with programs rated in the lowest 40 percent trained 5 or more teams. The highest percentage (35.2 percent) of departments training only 1 or 2 teams was in the category rated 1.

Over 70 percent of the instructors in programs rated 4 or 5 compared to 28 percent in programs rated 1 or 2 trained 3 or more teams.

$\underline{Ho_4}$ - _There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of students trained and entering speaking contests_.

Data in Table 6 revealed that over one-half (51.4 percent) of the 37 departments with summer programs rated 1 had trained fewer than 11 students to enter speaking contests, whereas only 5 (13.5 percent) of those 37 departments with summer programs rated 5 trained fewer than 11 students. Of the 24 departments that trained 41 or more students for speaking contests, 17 departments had summer programs rated 4 or 5, whereas only 3 programs were rated 1 or 2.

The computed chi-square value of 249.082 was highly significant at the one percent level. The null hypothesis that there is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of students trained and entering speaking contests was rejected.

Table 6. Summer program rating by the number of students in vocational agriculture departments entering speaking contests[a]

Number of students entering speaking contests	Summer program rating					Total number of departments
	5	4	3	2	1	
1-10	5 13.5%	8 21.6%	14 37.8%	15 40.6%	19 51.4%	61 33.0%
11-20	10 27.0%	10 27.0%	9 24.3%	11 29.7%	8 21.6%	48 25.9%
21-30	5 13.5%	9 24.4%	7 19.0%	5 13.5%	6 16.2%	32 17.3%
31-40	7 19.0%	3 8.1%	3 8.1%	4 10.8%	3 8.1%	20 10.8%
41+	10 27.0%	7 18.9%	4 10.8%	2 5.4%	1 2.7%	24 13.0%
Total	37	37	37	37	37	185

[a] Statistical analyses: computed chi-square value = 249.082, table value at the 5 percent level = 43.773, table value at the 1 percent level = 50.892.

A positive relationship existed between the summer program rating and the number of students who entered non-speaking contests as indicated by data in Table 7. Over one-third (37.9 percent) of the departments with summer programs rated 5 had 41 or more students per department who entered contests, whereas only 4 (10.8 percent) of those departments rated 1 entered 41 or more students in non-speaking contests.

It was of interest to note that only 6 (16.2 percent) of the 37 departments with summer programs rated 5 had 10 or fewer students who entered contests, whereas 20 (54.1 percent) of those rated 1 had ten or fewer students who entered contests.

The computed chi-square value of 220.913 for Table 7 indicated that a highly significant relationship at the one percent level existed between the summer program rating and the number of students who entered non-speaking contests.

It appears that the motivational value of competition through various types of contests was valuable to the student.

If the instructor promotes and trains students to compete in contests for which they are eligible, other students also become interested as the enthusiasm of success is generated from the students who succeed.

The students no doubt sensed the personal interest the instructor had in them as they prepared for and competed in the contests.

It appears from these data that, the more active the instructor is during the summer as well as during the school year in using contests as a motivational and educational technique, the higher the program rating will be.

Table 7. Summer program rating by the number of students in vocational agriculture departments entering non-speaking contests[a]

Number of students entering non-speaking contests	Summer program rating					Total number departments
	5	4	3	2	1	
1-10	6	10	17	19	20	72
	16.2%	27.0%	46.0%	51.4%	54.1%	38.9%
11-20	11	9	6	7	7	40
	29.7%	24.3%	16.2%	18.9%	18.9%	21.6%
21-30	5	10	5	6	3	29
	13.5%	27.0%	13.5%	16.2%	8.1%	15.7%
31-40	1	1	2	1	3	8
	2.7%	2.7%	5.4%	2.7%	8.1%	4.3%
41+	14	7	7	4	4	36
	37.9%	18.9%	18.9%	10.8%	10.8%	19.5%
Total	37	37	37	37	37	185

[a] Statistical analyses: computed chi-square value = 220.913, table value at the 5 percent level = 43.773, table value at the 1 percent level = 50.892.

Ho$_5$ - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of Iowa farmer degrees received at the 1969 Iowa FFA leadership conference.

A review of data in Table 8 reveal that only 2 (5.4 percent) of the departments with summer programs rated 5 had no students who received the Iowa Farmer degree in 1969, whereas 28 (75.7 percent) of the departments rated 1 had no Iowa Farmers that year. Over three-fourths (75.7 percent) of the departments with summer programs rated 5 had two or more Iowa Farmer recipients in 1969, whereas only 3 (8.1 percent) departments with programs rated 1 had multiple recipients.

The Iowa Farmer degree has been considered by many supervisors and agricultural educators as a reliable indicator of an active department of vocational agriculture. The data support this evaluative criteria as a reliable indicator of rating summer vocational agriculture program effectiveness.

A highly significant relation existed at the one percent level when the computed F-value (16.16) from the Scheffé test for analysis of variance was compared to the table F-value (3.43). The null hypothesis that there is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of Iowa Farmer degrees received at the 1969 Iowa FFA leadership conference was rejected.

Table 8. Summer program rating by the number of students in vocational agriculture departments who received the Iowa Farmer degree in 1969[a]

Number of Iowa Farmer degrees	Summer program rating					Total number of departments
	5	4	3	2	1	
0	2 5.4%	13 35.7%	19 51.4%	18 48.7%	28 75.7%	80 43.2%
1	7 18.9%	11 29.7%	9 24.3%	14 37.8%	6 16.2%	47 25.4%
2	18 48.7%	10 27.0%	7 18.9%	4 10.8%	3 8.1%	42 22.7%
3	10 27.0%	0	2 5.4%	0	0	12 6.5%
4	0	2 5.4%	0	1 2.7%	0	3 1.6%
6	0	1 2.7%	0	0	0	1 0.6%
Total	37	37	37	37	37	185

[a] Statistical analyses: Scheffé test for analysis of variance computed F-value = 16.16, table F-value at the 5 percent level = 2.42, table F-value at the 1 percent level = 3.43.

$\underline{Ho_6}$ - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of students who exhibited at shows.

Data in Table 9 reveal that all departments with summer programs which were rated in the top 40 percent had students exhibiting at shows, whereas 10 departments with no exhibitors were rated in the lower 40 percent. Thirty-six of the departments with summer programs which were rated 4 or 5 had 16 or more students who exhibited at shows. Only 11 departments which were rated 1 or 2 had 16 or more exhibitors.

Over twice as many (1,334) students from departments with summer programs which rated in the top 40 percent, compared to those in the bottom 40 percent (651), exhibited at shows.

A highly significant relationship existed between summer program rank and the number of students who exhibited at shows according to data in Table 9.

Data reveal that the F-value (12.40) from the Scheffé test for analysis of variance was highly significant at the one percent level.

The null hypothesis was rejected that there is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of students who exhibited at shows.

Table 9. Summer program rating by the number of students in vocational agriculture departments who exhibited at shows[a]

Summer program rating	Number of depart- ments	Number of students exhibiting						Total	Mean
		0	1-5	6-10	11-15	16-20	21+		
5			10	44	92	121	527	794	21.45
	37	0	2	5	7	7	16		
4			26	35	157	135	187	540	14.59
	37	0	7	5	12	8	5		
3			23	63	89	73	124	372	10.05
	37	6	8	8	7	4	4		
2			17	110	89	53	46	315	8.51
	37	7	5	13	7	3	2		
1			30	91	104	90	21	336	9.08
	37	3	8	12	8	5	1		
Total			106	339	431	482	905	2263	12.77
	185	16	30	43	41	27	28		

[a] Statistical analyses: Scheffé test for analysis of variance computed F-value = 12.40, table F-value at the 5 percent level = 2.42, table F-value at the 1 percent level = 3.43.

An analysis of data in Table 10 reveals that 37 (50 percent) of the departments with summer programs rated in the top 40 percent had no state fair exhibitors, whereas 58 (79 percent) of the programs rated in the bottom 40 percent had no state fair exhibitors in 1969. It was further noted that 22 departments with summer programs rated in the top 40 percent, compared to 4 programs rated in the bottom 40 percent, had three or more students who exhibited at the state fair. Of the 242 students exhibiting at the state fair in 1969, only 35 were from programs rated in the bottom 40 percent, whereas 180 were from programs rated in the top 40 percent.

The mean number of students (2.62) who exhibited from departments with a summer program rating of 5 was seven times greater than the mean number (.38) from departments with programs rated 1.

Instructors who conducted highly rated programs placed more students for occupational employment experience in agriculturally related businesses than did those in the lower rated programs, as revealed by data in Table 11.

A mean of 2.2 students per department were placed in programs rated in the top 40 percent, whereas a mean of 0.8 students were placed by instructors in programs rated in the lower 40 percent.

These data suggest that the instructors in top rated programs have tended to keep the program more current and relevant to student interests and manpower needs. Many rural

Table 10. Summer program rating by the number of students in vocational agriculture departments who exhibited at the 1969 Iowa State Fair

Summer program rating	Number of depart-ments	Number of students who exhibited							
		0	1-2	3-4	5-6	7-11	13-23	Total	Mean
5		0	10	20	16	28	23	97	2.62
	37	18	6	6	3	3	1		
4		0	11	10	6	23	33	83	2.24
	37	19	9	3	1	3	2		
3		0	6	7	6	8	0	27	0.73
	37	28	5	2	1	1	0		
2		0	9	0	12	0	0	21	0.57
	37	29	6	0	2	0	0		
1		0	8	6	0	0	0	14	0.38
	37	29	6	2	0	0	0		
Total		0	44	43	40	59	56	242	1.31
	185	123	32	13	7	7	3		

youth will not have the opportunity or desire to remain on the farm. With increased technology, an increasing number of agriculturally related occupations are available for those students with agricultural skills and interests. Vocational agriculture in Iowa schools has rapidly expanded to include instruction and the development of competencies in the agribusiness areas as well as in production agriculture.

Table 11. Summer program rating by the number of students in vocational agriculture who were placed for agribusiness employment experience and cooperating employers

Summer program rating	Number of departments	Mean number per department	
		Employment centers	Students placed
5	37	1.8	2.5
4	37	2.0	1.9
3	37	1.2	1.2
2	37	0.6	0.7
1	37	0.7	0.9
Total	185	1.3	1.4

Ho_7 - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the dollars labor income per student from supervised farming and employment experience programs.

It was revealed by data in Table 12 that the mean dollars

Table 12. Summer program rating by the number of dollars labor income received by day school students from supervised experience and farming programs[a]

Summer program rating	Number of departments	Day school students		Dollars labor income 1969 calendar year		
		Mean	Total	Total	Mean per department	Mean per student
5	37	54.0	1998	$1,223,156	$33,058	$612.19
4	37	58.2	2154	1,035,600	27,989	480.78
3	37	44.5	1647	791,713	21,398	480.70
2	37	46.7	1728	724,084	19,570	419.03
1	37	38.3	1417	503,233	13,601	355.14
Total	185	48.3	8944	4,277,786	23,123	469.57

[a] Statistical analyses: Scheffé test for analysis of variance computed F-value = 8.07, table F-value at the 5 percent level = 2.42, table F-value at the 1 percent level = 3.43.

labor income per student increased by over 80 percent when departments with a summer program rated 1 were compared to departments with programs rated 5.

Students in departments with summer programs rated in the lower 40 percent, reported an average labor income only 70 percent as great as those students in departments with programs rated in the upper 40 percent.

The economy of those communities in which the vocational agriculture department had a summer program rated 5, received an average of over $33,000 of new wealth compared to an average of only $13,601 of added wealth to those communities where the vocational agriculture summer program was rated 1.

The dollars of labor income has a highly significant relation at the one percent level to the summer program rating. This was revealed by the Scheffé test for analysis of variance computed F-value of 8.07 in Table 12, therefore the null hypothesis was rejected. The hypothesis rejected was that there is no relation between the quintile group rating of the effectiveness of the summer program of vocational agriculture and the dollars labor income per student from supervised farming and agribusiness employment experience programs.

> $\underline{Ho_8}$ - *There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of of instructional class field trips conducted.*

Departments with highly rated summer programs conducted at least twice as many instructional field trips and tours as did departments with the lower rated summer programs. Data in Table 13 reveal that the top 40 percent of summer programs rated were in departments where instructors conducted a mean of 19.2 class field trips compared to a mean of only 11.1 conducted by instructors in departments with summer programs rated in the bottom 40 percent.

Table 13. Summer program rating by the number of instructional field trips and tours conducted in vocational agriculture departments[a]

Summer program rating	Number of departments	Class field trips Mean	Other trips and tours Mean
5	37	19.9	4.4
4	37	18.5	4.4
3	37	16.2	2.2
2	37	13.4	2.4
1	37	8.8	1.6
Total	185	15.4	3.0

[a] Statistical analyses: Scheffé test for analysis of variance computed F-value = 4.56, table F-value at the 5 percent level = 2.42, table F-value at the 1 percent level = 3.43.

These data support the assumption that more practical and relevant instruction takes place in the departments with highly rated summer programs.

The Scheffé test for analysis of variance F-value (4.56) was found to be highly significant at the one percent level. The null hypothesis was rejected. It appeared that there was a relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of instructional class field trips conducted.

Ho_9 - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of newspaper articles relating to the program.

Public relations activities had a positive relationship with the summer program rating as revealed by data in Table 14.

Table 14. Summer program rating by the number of public relations activities in vocational agriculture departments[a]

		Number of publicity items prepared		
Summer program rating	Number of departments	Newspaper Mean	Radio and television Mean	Speeches Mean
5	37	48.0	13.4	5.6
4	37	34.5	9.0	3.1
3	37	31.4	4.9	1.0
2	37	31.8	3.0	1.6
1	37	19.6	4.1	1.3
Total	185	34.3	6.9	2.5

[a] Statistical analyses: Scheffé test for analysis of variance computed F-values = 6.17, table F-value at the 5 percent level = 2.42, table F-value at the 1 percent level = 3.43.

Newspapers published an average of 41.2 articles for departments with summer programs rated in the top 40 percent, whereas an average of only 20.7 news articles from departments with programs rated in the bottom 40 percent were published by newspapers.

A similar comparative relationship existed between summer program rating and radio and television programs conducted and speeches given.

It is reasonable to assume that departments where more activities take place have more to publicize. It follows that the amount of publicity will increase in direct proportion to the number of meaningful and successful activities conducted in a department of vocational agriculture. Publicity provides teachers an additional motivational technique which can bring recognition to individuals and groups of students who experience success and satisfaction in various vocational agriculture and FFA activities.

There was a highly significant difference between the quintile groups and the number of newspaper articles published as was indicated by the 6.17 F-value, significant at the one percent level of confidence. The null hypothesis was rejected. A possible hypothesis might be that there was a relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of newspaper articles relating to the program.

Ho_{10} - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of years of teacher tenure in the present position

Both tenure and experience of a vocational agriculture instructor have been felt to be important assets to a community in developing both a strong summer program and total program of vocational agriculture. Data in Table 15 support this assumption. The instructors in departments with summer programs rated in the top 40 percent had 12 mean years of experience and 8.4 mean years of tenure, whereas those in the bottom 40 percent had 9 mean years of experience and 5.9 mean years of tenure.

Table 15. Summer program rating by the number of years teaching experience and tenure of instructors in vocational agriculture departments[a]

Summer program rating	Number of departments	Mean years Experience	Mean years tenure
5	37	14.3	11.0
4	37	9.0	6.8
3	37	8.9	7.1
2	37	10.1	6.7
1	37	8.0	5.1
Total	185	10.1	7.3

[a] Statistical analyses: Scheffé test for analysis of variance computed F-value = 3.78, table F-value at the 5 percent level = 2.42, table F-value at the 1 percent level = 3.43.

It is felt by many agricultural educators and consultants that it takes an instructor at least three years to become well known and established in a community as a professional agricultural leader and educator.

The F-value (3.78) was found to be highly significant at the one percent level when comparing tenure to summer program rating, therefore the null hypothesis was rejected. Data indicated a relation between the quintile group rating of the effectiveness of the summer programs of vocational agriculture and the number of years of teacher tenure in the present position.

$\underline{\text{Ho}_{11}}$ - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of weeks the teacher attended summer school.

No significant relationship existed between the summer program rating and summer school attendance as revealed by data in Table 16. Nearly equal numbers of instructors in departments in all the summer program rating categories did not attend summer school. It was also noted that little variation existed between program rating categories of instructors who attended summer school for either a 3 or 4 week session or a 5 or 6 week session.

The computed chi-square value of 5.593 was not significant. The null hypothesis that there is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of weeks the teacher attended summer school, was not rejected.

Table 16. Summer program rating by the number of weeks of summer school attendance by instructors in vocational agriculture departments[a]

Summer program rating	Total number of departments	Number of weeks the instructor attended summer school		
		0	3-4	5-6
5	37	28	8	1
4	37	29	4	4
3	37	27	7	3
2	37	31	5	1
1	37	27	8	2
Total	185	142	32	11

[a] Statistical analyses: Computed chi-square value = 5.593, table value at the 5 percent level = 43.773, table value at the 1 percent level = 50.892.

Coefficients of Correlation of Variables Influencing Summer Programs of Vocational Agriculture

A correlation matrix with 18 variables which may have an influence on summer programs of vocational agriculture appears in Table 17. Values required for significance at the five percent (.14) and one percent (.19) level were used in analysis of the data.

Table 17a. Identification of variables given in Table 17b

Number	Variable
1	Summer program rating
2	Years of vocational agriculture teaching experience
3	Years of tenure in present position
4	Day school enrollment
5	Adult farmer enrollment
6	Farm visits during fiscal year 1969
7	Farm visits during the summer of 1969
8	Judging teams trained
9	Students who entered speaking contests
10	Students placed for agribusiness employment experience
11	Dollars of labor income per student
12	Full-time vocational agriculture department
13	Students who exhibited at shows
14	Students who exhibited at the Iowa State Fair
15	Iowa Farmer degree recipients
16	Educational field trips conducted
17	Total miles traveled
18	Summer miles traveled

Table 17b. Coefficients of correlation of variables influencing summer programs of vocational agriculture[a]

Variables	1	2	3	4	5	6	7	8	9
1	1.00								
2	.20	1.00							
3	.24	.86	1.00						
4	.33	.19	.19	1.00					
5	.26	.15	.06	.21	1.00				
6	.55	.26	.29	.36	.31	1.00			
7	.42	.28	.34	.29	.20	.77	1.00		
8	.25	-.10	-.06	-.02	.01	.15	.18	1.00	
9	.35	-.02	-.01	.12	.02	.25	.13	.22	1.00
10	.20	.18	.26	.08	.10	.26	.20	.01	.10
11	.37	.18	.12	.18	.12	.27	.16	.11	.25
12	.38	-.02	.08	.35	.17	.25	.22	.16	.07
13	.42	.24	.21	.24	.21	.46	.37	.24	.17
14	.27	.00	-.02	.05	-.04	.11	.00	.19	.15
15	.49	.21	.20	.23	.13	.34	.25	.17	.35
16	.30	.06	-.01	-.02	.10	.25	.12	.06	.16
17	.50	.10	.05	.31	.45	.58	.39	.18	.35
18	.51	.09	.17	.37	.24	.57	.51	.30	.37

[a] Statistical analyses: N = 185, 1 percent level of significance = .19, 5 percent level of significance = .14.

Table 17b (Continued)

Variables	10	11	12	13	14	15	16	17	18
10	1.00								
11	.12	1.00							
12	.13	.20	1.00						
13	.03	.28	.13	1.00					
14	.14	.13	.05	.21	1.00				
15	.12	.47	.20	.41	.26	1.00			
16	.03	.27	.10	.19	.19	.31	1.00		
17	.13	.28	.22	.38	.13	.40	.22	1.00	
18	.19	.28	.27	.47	.16	.40	.13	.62	1.00

Positive coefficients of correlation highly significant at the one percent level were found for all 18 variables when compared to the summer program rating.

The variables most highly correlated with the summer program rating were (1) farm visits during the 1969 fiscal year (.55), (2) miles traveled during the summer of 1969 (.51), (3) total miles traveled during the 1969 fiscal year (.50), (4) Iowa Farmer degrees received (.49), (5) exhibitors at shows (.42), (6) summer farm visits (.42), (7) full-time vocational agriculture department (.38) and the dollars labor income from supervised experience and farming programs (.37).

The 18 variables selected were felt by the author to be very important factors in the evaluation of a vocational agriculture department and especially the summer program rating. The coefficients of correlation support this assumption. There are many other activities and factors not included in this study which can be and are used for evaluating the effectiveness of a department of vocational agriculture in a community. Other important evaluative criteria might be the number of vocational agriculture graduates established in farming or employed in an agriculturally related occupation, the number of district or state FFA officers, and how effectively the advisory council is used in program planning.

The high correlation (.86) which existed between teaching experience and tenure indicated that those who remained in teaching tended to remain in the same community rather than moving frequently.

Since teacher tenure was highly correlated with teaching experience, all but four variables were significantly correlated at the one and five percent levels when compared with experience.

Tenure had a lower correlation with adult farmer enrollment (.06) and labor income per student (.12) than did teaching experience. Both variables were not significantly correlated with tenure, whereas they were significantly correlated at the five percent level with experience. Possibly experience with the use of successful techniques to increase adult farmer enrollment and labor income have more influence than tenure.

The correlation between day school and adult farmer enrollments (.21) was significant at the one percent level. Both variables, day school and adult farmer enrollments were also highly correlated when compared to (1) total farm visits (.36 and .31), (2) summer farm visits (.29 and .20), (3) total miles traveled (.31 and .45) and (4) miles traveled during the summer of 1969 (.37 and .24).

Day school enrollment produced a significant and positive correlation (.23) when compared with Iowa Farmer degrees, whereas the adult farmer enrollment was not significantly correlated when compared with the number of Iowa Farmer degrees.

Adult farmer enrollment was correlated significantly at the one percent level with (1) total farm visits (.31), (2) summer farm visits (.20), (3) total miles driven (.45), (4) summer miles driven (.24), (5) day school enrollment (.21) and (6) with summer program rating (.26).

The total farm visits during the 1969 fiscal year were positively and significantly correlated with all variables except number of state fair exhibitors. The variables most highly correlated with total farm visits were summer farm visits (.77), summer miles traveled (.57), and total miles traveled (.58).

No significant correlations existed when comparing summer farm visits with number of students entering speaking contests (.13), number of state fair exhibitors (.00) and number of field trips taken (.12). Summer farm visits yielded a significantly correlated value at the five percent level when compared with labor income per student (.16) and judging teams trained (.18). The remaining 13 variables were highly correlated at the one percent level with the summer program rating.

Summer visits would have very little direct influence, as evidenced by the data, on speaking contests and educational field trips since these are primarily activities conducted during the school year. Educational field trips conducted during the summer were generally reported as trips and tours on the final vocational agriculture report.

The number of judging teams trained revealed a positive significantly correlated relationship when compared with other similar activities in vocational agriculture programs. These were (1) speaking contests (.22), (2) exhibitors at shows (.24), (3) exhibitors at the state fair (.19), and (4) summer program rating (.25). It seems apparent from the data that instructors who motivate students to participate on judging teams also have the ability and interest to encourage students to enter other competitive events and activities for skill and leadership development.

It was noted that the correlations between the variables and speaking contests was similar to those between the variables and judging teams. One difference noted however, was the positive correlation of .25 between speaking contests and labor income, whereas the correlation between judging teams trained and labor income was not significant.

A possible explanation is that livestock selection is only one factor in developing a strong diversified farming program. The ability to research a subject in formulating a speech is similar to developing and carrying out a management plan. This also aids in developing problem solving ability which can have a greater influence on labor income than livestock and crop selection.

Tenure and farm visits were the two variables with the highest positive correlations with students placed for agricultural occupations employment experience. Both are important in terms of knowing the local agribusiness men in the community with whom the instructor will be working and placing students. Much of the organization, planning and coordination with business men can be accomplished during the summer in preparation for the following school year.

Supervisory Visits

The farm visit has been found to be one of the most important educational techniques for vocational agriculture programs. It has been a unique feature of vocational agriculture since its inception in 1917 in providing meaningful, related and individualized instruction. More recently, supervisory visits to cooperating agribusiness firms, with which students are placed for employment experience, have been found to be equally important.

Ho_{12} - There is no relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of supervisory farm visits made during the summer of 1969.

A Comparison of data in Table 18 indicate increased numbers of miles driven and farm visits made by instructors from low to highly rated summer programs in departments of vocational agriculture.

Table 18. Summer program rating by the number of farm visits made and miles traveled during fiscal year 1969[a]

Summer program rating	Number of departments	Mean miles traveled		Mean farm visits made	
		Fiscal 1969	Summer 1969	Fiscal 1969	Summer 1969
5	37	8217.6	2635.6	405.8	191.2
4	37	6308.0	2475.8	346.9	177.9
3	37	5103.5	1759.6	243.5	121.0
2	37	5012.0	1660.3	224.1	107.6
1	37	3736.5	1308.9	178.5	101.5
Total	185	5675.5	1968.0	279.8	139.8

[a] Statistical analyses: Scheffé test for analysis of variance computed F-value = 11.19, table F-value at the 5 percent level = 2.42, table F-value at the 1 percent level = 3.43.

Instructors who conducted summer programs rated in the top 40 percent traveled 2556 mean miles during the summer of 1969 and made an average of 185 farm visits, whereas those in the lower 40 percent traveled 1485 mean miles and made an average of 105 farm visits.

Instructors who conducted summer programs rated in the top 40 percent traveled an average of 7263 miles and made an average of 377 total farm visits. In contrast, those instructors with programs rated in the bottom 40 percent traveled 4374 mean miles and made an average of 201 farm visits.

The computed F-value from the Scheffé test for analysis of variance was found to be highly significant at the one percent level when each of the four variables were compared to the summer program rating, as revealed by data in Table 18. The F-value for summer farm visits was the lowest (11.19) of the four factors, however, it was highly significant. The null hypothesis was rejected. There was evidence that there was a relation between the quintile group rating of the effectiveness of summer programs of vocational agriculture and the number of supervisory farm visits made during the summer of 1969.

Data in Table 19 reveal that a positive relation existed between the number of summer farm visits and total farm visits made during the fiscal year 1969.

Table 19. Number of summer farm visits by number of total farm visits made in 1969 by instructors in vocational agriculture departments

Total number of farm visits 1969 fiscal year	1969 summer farm visits					Total number of departments
	1-50	51-100	101-150	151-200	201+	
1-100	3 20.0%	6 10.9%	1 2.0%	0	0	10 5.4%
101-200	7 46.7%	29 52.7%	10 20.0%	3 10.0%	2 5.7%	51 27.6%
201-300	4 26.7%	15 27.3%	25 50.0%	12 40.0%	2 5.7%	58 31.3%
301-400	1 6.7%	4 7.3%	11 22.0%	8 26.7%	8 22.9%	32 17.3%
401-500	0	1 1.8%	1 2.0%	7 23.3%	10 28.6%	19 10.3%
501+	0	0	2 4.0%	0	13 37.1%	15 8.1%
Total	15	55	50	30	35	185

It was noted that about two-thirds of the teachers in departments with less than 100 farm visits also made fewer than 200 total visits during fiscal year 1969. Of those instructors who made over 200 summer farm visits, about two-thirds made over 400 total visits during the year.

These data support the generalization, that the majority of vocational agriculture instructors made about twice as many supervisory visits to farms and businesses annually as they did during the 3 summer months. It appeared that the number of supervisory visits during the summer months could be used as a reliable predictor or evaluative criteria in projecting total farm visits to be made during the year.

Data in Table 20 revealed a significant relationship between summer farm visits and summer miles driven.

Table 20. Summer farm visits by the number of miles traveled in summer by instructors in vocational agriculture departments

Number of summer miles traveled	1969 summer farm visits					Total number of departments
	1-50	51-100	101-150	151-200	201+	
1-1000	4	15	2	1	0	22
	26.7%	27.3%	4.0%	3.3%		11.9%
1001-2000	8	30	23	16	11	88
	53.3%	54.5%	46.0%	53.3%	31.4%	47.6%
2001-3000	3	7	16	8	16	50
	20.0%	12.7%	32.0%	26.7%	45.7%	27.0%
3001-4000	0	2	8	4	3	17
		3.6%	16.0%	13.3%	8.6%	9.2%
4001+	0	1	1	1	5	8
		1.8%	2.0%	3.3%	14.3%	4.3%
Total	15	55	50	30	35	185

Approximately 80 percent of the instructors who made 1 to 50 and 51 to 100 farm visits during the summer of 1969 traveled less than 2000 miles.

Approximately 70 percent of those instructors who made over 200 farm visits traveled over 2000 miles during the 3 summer months of 1969.

It was felt that some instructors may use more mileage for seminars, field days, meetings and professional improvement than for individualized, on-farm instructional visits. Some administrators have questioned a seemingly large mileage budget for farm visits. Instructors making 200 visits and driving 2000 and 3000 miles during the summer average 10 to 15 miles per visit. With mileage reimbursement at 10 cents per mile the cost of $1.00 to $1.50 per visit seems reasonable to get the instructor to where individualized teaching was done in a practical setting.

The 70 departments in which less than 100 farm visits were made produced only 52 Iowa Farmer degree recipients, as revealed by data in Table 21.

The 35 departments in which instructors made more than 200 farm visits were also awarded 52 Iowa Farmer degrees. Instructors in the remaining 80 departments made between 101 to 200 farm visits and developed 79 Iowa Farmer degree winners.

The average number of Iowa Farmer degrees awarded per department increased in direct relation to the number of summer farm visits made as follows:

1 to 100 farm visits, 0.74 Iowa Farmers per department;
101 to 200 farm visits, 0.98 Iowa Farmers per department;
201 or more farm visits, 1.48 Iowa Farmers per department.

Table 21. Summer farm visits by the number of Iowa Farmer degree recipients in vocational agriculture departments

Number of Iowa Farmers	1969 summer farm visits					Total number of departments
	1-50	51-100	101-150	151-200	201+	
0	8	28	23	12	9	80
	53.3%	50.9%	46.0%	40.0%	25.7%	43.2%
1	3	16	10	8	10	47
	20.0%	29.1%	20.0%	26.7%	28.6%	25.4%
2	4	9	13	8	8	42
	26.7%	16.4%	26.0%	26.7%	22.9%	22.7%
3	0	1	4	1	6	12
		1.8%	8.0%	3.3%	17.1%	6.5%
4+	0	1	0	1	2	4
		1.8%		3.3%	5.7%	2.2%
Total	15	55	50	30	35	185

Data in Table 22 indicate that as the number of farm visits in fiscal year 1969 increased, the number of students who received the Iowa Farmer degree increased. In departments where fewer than 100 farm visits were made in fiscal 1969, 60 percent had no students receiving the Iowa Farmer degree, whereas in departments where over 400 visits were made only 20.6 percent had no students receiving the degree.

Table 22. Total number of farm visits made by the number of Iowa Farmer degree recipients in vocational agriculture departments

Number of Iowa Farmers	1969 total farm visits					Total number of departments
	1-100	101-200	201-300	301-400	401+	
0	6	30	27	10	7	80
	60.0%	58.8%	46.6%	31.2%	20.6%	43.2%
1	1	10	16	11	9	47
	10.0%	19.6%	27.6%	34.4%	26.5%	25.4%
2	3	11	12	5	11	42
	30.0%	21.6%	20.7%	15.6%	32.3%	22.7%
3	0	0	1	6	5	12
			1.7%	18.8%	14.7%	6.5%
4+	0	0	2	0	2	4
			3.4%		5.9%	2.2%
Total	10	51	58	32	34	185

It was further noted that as total farm visits increased, the number of departments where two or more students received the degree also increased. Instructors in 13 of the 16 departments that had three or more Iowa Farmers made 301 or more farm visits. In none of the 16 departments were fewer than 201 visits made.

It has been generally accepted that as vocational agriculture instructors make more farm visits to farms of day school students, supervised farming programs improve and labor income increases.

Data in Table 23 reveal that about two-thirds of all departments with over 100 farm visits had an average labor income per student of over $400, whereas 53 percent of those where fewer than 50 summer visits were made had an average labor income of less than $400 per student. Of the 48 departments with average labor incomes of $601 or above, 19 reported 151 or more summer farm visits.

Table 23. Summer farm visits by dollars labor income per day school student in vocational agriculture departments

Dollars labor income per student	1969 summer farm visits					Total number of departments
	1-50	51-100	101-150	151-200	201+	
1-200	2	3	3	0	1	9
	13.3%	5.6%	6.0%		2.8%	4.9%
201-400	6	24	15	10	12	67
	40.0%	44.4%	30.0%	33.3%	34.3%	36.4%
401-600	3	18	16	13	10	60
	20.1%	33.3%	32.0%	43.3%	28.6%	32.6%
601-800	2	9	11	5	8	35
	13.3%	16.7%	22.0%	16.7%	22.9%	19.0%
801+	2	0	5	2	4	13
	13.3%		10.0%	6.7%	11.4%	7.1%
Total	15	54	50	30	35	184

It was observed from the data in Table 24 that summer school attendance did not significantly affect the number of summer farm visits made.

Table 24. Summer farm visits by the number of weeks of summer school attendance by instructors[a]

Number of weeks attended summer school	1969 summer farm visits					Total number of departments
	1-50	51-100	101-150	151-200	201+	
0	12	35	40	25	30	142
	80.0%	63.6%	80.0%	83.8%	85.7%	76.8%
3	2	12	6	4	3	27
	13.3%	21.8%	12.0%	13.3%	8.6%	14.6%
4+	1	8	4	1	2	16
	6.7%	14.6%	8.0%	3.4%	5.7%	8.6%
Total	15	55	50	30	35	185

[a] Statistical analyses: computed chi-square value = 3.052, table value at the 5 percent level = 43.773, table value at the 1 percent level = 50.892.

It was noted that the percentage of departments in each mileage category did not vary greatly regardless of the number of weeks of summer school attended.

The computed chi-square value of 3.052 was not significant. There also was no significance when summer school attendance was compared to summer program rating as revealed by data in Table 16.

These data support the findings by Koene (20) of Wisconsin. He found that apparently the instructors who attended summer school continued to conduct a vigorous summer program even though several weeks was spent out of the community. Evidently the more conscientious instructors compensate for time away by putting more evening and weekend time on the job to continue normal summer program activities. Possibly the instructor did a more efficient job of organizing and scheduling the activities, plus delegating some responsibilities to others so that the program did not suffer due to his absence.

These data imply that local boards of education can justify granting their instructor a reasonable leave of absence for summer school work without fear of weakening the summer program. It is further assumed the teacher would conduct a stronger program as he continues professional improvement through summer school attendance.

These data support the policy established in the State Plan for Vocational Education regarding summer school attendance by instructors in approved vocational agriculture departments. Present policy allows an instructor to be granted a 3 week leave after 1 year and 2 years, and a 6 week leave after 3 years employment as vocational agriculture instructor in the community. A policy of an unlimited leave of absence for summer school would undoubtedly cause a sharp decline in summer program activities and the summer program rating.

Evidence that teachers place more emphasis on follow up and supervisory farm visits as they became more experienced was revealed by data in Table 25.

Table 25. Summer farm visits by the number of years teaching experience of instructors in vocational agriculture departments[a]

Number of summer farm visits	Years teaching experience					Total number of departments
	1-4	5-8	9-12	13-16	17+	
1-50	7 11.9%	1 2.8%	1 3.8%	3 11.1%	3 8.1%	15 8.1%
51-100	24 40.7%	11 30.6%	6 23.1%	9 33.3%	5 13.5%	55 29.7%
101-150	16 27.1%	16 44.4%	9 34.6%	6 22.2%	3 8.1%	50 27.0%
151-200	6 10.2%	4 11.1%	4 15.4%	1 3.7%	15 40.6%	30 16.2%
201+	6 10.2%	4 11.1%	6 23.1%	8 29.6%	11 29.7%	35 19.0%
Total	59	36	26	27	37	185

[a] Statistical analyses: Computed chi-square value = 110.846, table value at the 5 percent level = 43.773, table value at the 1 percent level = 50.892.

Over one-half (52.6 percent) of all teachers with 1 to 4 years of vocational agriculture teaching experience made less than 101 summer visits, whereas 21.6 percent of those teachers with

17 or more years teaching experience made fewer than 101 visits. It was noted that an inverse relation existed when departments were compared in which over 150 summer visits were made in 1969. Seventy percent of those with 17 or more years experience as compared to only 20.4 percent of those who had been teaching 1 to 4 years made over 150 visits during the summer of 1969. The chi-square test revealed a highly significant relation between these two factors.

Data in Table 26 reveal that 25 to 40 percent of those instructors with 13 or more years of vocational agriculture teaching experience made over 400 farm visits in fiscal 1969, whereas only 10 percent of those with 1 to 4 years teaching experience made as many visits. About 82 percent of those teachers with 1 to 4 years experience made less than 301 visits, whereas about 45 percent of those with 17 or more years experience made fewer than 301 visits.

The value of the farm visit became more evident to instructors as they gained teaching experience. Possibly the instructors became more efficient in the use of planning and preparation time thereby allowing more time for farm visits.

A comparison of data in Tables 26 and 27 revealed that 8 of the 10 teachers making less than 101 farm visits annually had only 1 to 4 years of tenure, however 2 of them had 9 to 12, 2 had 13 to 16 years, and 1 had over 17 years of experience.

Table 26. Number of total farm visits made by number of years teaching experience of instructors in vocational agriculture departments

Number of farm visits	Years teaching experience					Total number of departments
	1-4	5-8	9-12	13-16	17+	
1-100	5	0	2	2	1	10
	8.5%		7.7%	7.4%	2.7%	5.4%
101-200	22	12	4	6	7	51
	37.3%	33.3%	15.4%	22.2%	18.9%	27.6%
201-300	21	11	10	7	9	58
	35.6%	30.6%	38.5%	25.9%	24.3%	31.4%
301-400	5	12	5	5	5	32
	8.5%	33.3%	19.2%	18.5%	13.5%	17.2%
401+	6	1	5	7	15	34
	10.2%	2.8%	19.2%	25.9%	40.5%	18.4%
Total	59	36	26	27	37	185

Data in Table 27 indicated that a positive relation existed between years of teacher tenure and the total number of farm visits made during fiscal year 1969.

Fifty percent or more of the instructors with 9 or more years of tenure in the vocational agriculture department compared to only 28 to 30 percent of those with 1 to 8 years of tenure made over 300 farm visits.

Over 70 percent of the instructors who made less than 300 visits had 1 to 8 years of tenure.

It was of interest to note that none of the instructors who made less than 100 visits had 9 or more years of tenure. Evidently the instructors who develop long tenure find satisfaction in an active program of farm visits for individualized instruction and working closely with people. Those instructors who do not conduct an active program of on-farm instruction and followup are less likely to develop tenure in a community.

Table 27. Number of total farm visits made by the number of years teacher tenure of instructors in vocational agriculture departments

Total number of farm visits fiscal year 1969	Years of teacher tenure					Total number of departments
	1-4	5-8	9-12	13-16	17+	
1-100	8 8.5%	2 6.5%	0	0	0	10 5.4%
101-200	34 36.2%	6 19.4%	3 16.7%	1 5.6%	7 29.2%	51 27.6%
201-300	27 28.7%	14 45.2%	5 27.8%	7 38.9%	5 20.8%	58 31.4%
301-400	15 16.0%	8 25.8%	4 22.2%	3 16.7%	2 8.4%	32 17.2%
401-500	3 3.2%	1 3.2%	5 27.8%	5 27.8%	5 20.8%	19 10.3%
501+	7 7.5%	0	1 5.6%	2 11.1%	5 20.8%	15 8.1%
Total	94	31	18	18	24	185

Data in Table 28 indicate that 94 percent of the 34 departments where instructors made over 400 farm visits in fiscal year 1969 enrolled over 40 day school students. More than 50 students were enrolled by 60 percent of those departments.

Table 28. Total number of farm visits made in 1969 by the number of day school students enrolled in vocational agriculture departments

Number of day school students enrolled	Total farm visits					Total number of departments
	1-100	101-200	201-300	301-400	401+	
1-30	5 50.0%	11 21.6%	7 12.1%	3 9.4%	0	26 14.0%
31-40	3 30.0%	13 25.5%	16 27.6%	7 21.9%	2 5.9%	41 22.2%
41-50	2 20.0%	15 29.4%	12 20.7%	9 28.1%	11 32.3%	49 26.5%
51-60	0	4 7.8%	10 17.2%	7 21.9%	7 20.6%	28 15.1%
61-70	0	5 9.8%	7 12.1%	2 6.3%	7 20.6%	21 11.4%
71+	0	3 5.9%	6 10.3%	4 12.5%	7 20.6%	20 10.8%
Total	10	51	58	32	34	185

In departments where only 1 to 100 farm visits were made, 80 percent enrolled less than 40 day school students and 50 percent had enrollments in the range of 1 to 30.

Fewer than 201 visits were made in eight departments that had 61 or more day students. Two instructors with 31 to 40 students made more than 401 farm visits.

A positive relation existed between number of total farm visits and adult farmer enrollment as revealed by data in Table 29.

Table 29. Total number of farm visits made in 1969 by the number of adult farmers enrolled in vocational agriculture departments

Number of adult farmers enrolled	Total farm visits					Total number of departments
	1-100	101-200	201-300	301-400	401+	
0	2	1	0	1	0	4
	20.0%	2.0%		3.1%		2.2%
1-40	4	21	18	8	5	56
	40.0%	41.2%	31.0%	25.0%	14.7%	30.3%
41-80	4	23	25	19	14	85
	40.0%	45.0%	43.1%	59.4%	41.2%	45.9%
81-120	0	5	9	2	9	25
		9.8%	15.5%	6.3%	26.5%	13.5%
121-160	0	0	2	1	2	5
			3.4%	3.1%	5.9%	2.7%
161+	0	1	4	1	4	10
		2.0%	6.9%	3.1%	11.7%	5.4%
Total	10	51	58	32	34	185

Over 40 adult farmers were enrolled in 85 percent of the departments where 401 or more farm visits were made and in about two-thirds of all departments where 201 or more visits were made.

In departments in which less than 100 farm visits were made, 60 percent enrolled fewer than 40 in adult classes, whereas none of them enrolled over 80 adult farmers.

The review of literature revealed that opinions regarding the minimum number of farm visits varies among studies from 3 to 6 per day school student per year.

It is the opinion of the author, after several years teaching experience and vocational agriculture supervision in Iowa, that four is a minimum number of visits per student per year with six being a more preferable average. If the visits are well spaced, this means only one visit every quarter, or three months, and only 12 in the four years a student is enrolled in vocational agriculture. It appears that this is not too much individualized instruction in an age when individualized instruction is being emphasized in all areas of education, not just vocational education.

A ranking of the variables in order of the degree to which they were positively correlated with the summer program rating follows. This could be used as the basis of a self evaluation instrument to help instructors place proper emphasis on priorities.

1. Total farm visits
2. Summer miles traveled
3. Iowa Farmer degree
4. Summer farm visits
5. Exhibitors at shows
6. Dollars labor income
7. News items, public relations
8. Speaking contests
9. Day school enrollment
10. Educational field trips
11. Exhibitors at state fair

An analysis of the variables affecting summer programs revealed that programs rated 5 compared to programs rated 1, resulted in the following:

6 times as many Iowa Farmers

2 times as many judging teams

2 times as many speakers trained

2 times as many exhibitors at shows

7 times as many exhibitors at the state fair

3 times the number of students placed for agribusiness experience

2.5 times as many news, radio and television publicity items prepared

2.5 times as much new wealth into the community

2 times the dollar labor income per student

2 times as many field trips and tours.

Implications of Major Findings

It is apparent from data in this study that the summer program is an important and integral phase of a total program of vocational agriculture in a community. It provides the time to conduct seasonal educational activities in a less formal, more relaxed atmosphere. It provides the opportunity to use educational techniques which are quite effective yet are not widely used in other areas of education. It further provides the opportunity to more fully utilize educational and community resources on a 12-month basis. A further implication is that many other facets of education could make more adequate use of community resources and educational facilities on a 12-month rather than a 9-month basis.

Extended contracts to other educators could also more fully utilize their talents and expertise. The teachers would also realize a higher return on their educational investment.

Most Iowa public secondary schools are located in community school districts. The summer activities of instructors appears to indicate that vocational agriculture is a program which fits the community school concept of providing educational opportunities in agriculture for all people in the community. This is accomplished through the day school, young farmer, and adult farmer programs. Also the members of the Future Farmers of America organization become involved in many community service activities as well as leadership, recreation, citizenship, scholarship and educational activities.

Some administrators do not have a strong community school concept or philosophy regarding educational opportunities for all people in the community. They may feel more responsibility to the day school students because they work more closely with them.

Vocational agriculture teachers, however, may fail to keep them well informed about the needs and accomplishments in out-of-school phases of the program. A method recommended is the use of a detailed itinerary submitted to the administration weekly. If the teacher is a professional worker during the summer months, then his daily schedule should be known by the school employer just as it is during the school year.

Vocational agriculture teachers are in a unique position as agricultural educators in the community. In many Iowa schools he is the only professional faculty member, other than administrators, who serves on a 12-month contract. Many people in the community not involved directly with vocational agriculture are unaware of the summer phase of the program. Even some people more directly involved do not realize the importance of the summer program. A valuable avenue of public relations and communications between the school and community is provided through public contact with many of the vocational agriculture and FFA activities.

The data regarding publicity reveal that the more active instructors who make adequate use of the news media have a more informed community and a more highly rated summer program.

The supervisory farm visit has long been a valuable tool for effectively individualizing instruction. Data in this study support this technique as a valuable and essential tool to summer program and total program effectiveness.

Many educators, especially in areas of special needs, disadvantaged and the handicapped, might consider home visits as an added educational tool or technique to effectively individualize instruction. They could more fully understand student reactions and interests in making their teaching relevant to student needs.

Over one-half of the part-time departments (17 of 32) were rated 1 on summer program effectiveness. New wealth created in the economy of the communities where the summer vocational agriculture programs were rated 5, amounted to an average of $33,000. An average of only $13,601 was created in those communities with programs rated 1. Many teachers do not realize the full economic impact these programs can have when these dollars multiply in the channels of trade in the community. These data imply that increased emphasis should be placed on full-time departments of vocational agriculture. A possible method of working toward this goal would be decreased reimbursement of state and federal funds to part-time departments.

An analysis of data regarding the various active, on-going facets of vocational agriculture programs revealed that they all have a positive relation to summer program effectiveness.

The implication is that teachers are not as effective who do not use judging contests, speaking contests, fairs, and shows, field trips, tours and farm visits as educational techniques for the development of students.

Analysis of recommendations from other researchers in the literature reviewed and from the data in this study, indicate that some instructors need to reassess their philosophy and emphasis on certain activities in attaining the objectives of vocational agriculture. Many instructors get involved in routine and repeat activities which are comfortable and interest them, but neglect activities more important to those people they are hired to serve.

SUMMARY

All vocational agriculture departments in secondary schools in Iowa, where no change of teachers occurred during the summer of 1969, were used for this study. The only exception was where only one of the teachers in a multiple teacher department left. This study represented 185 of 231, or 80 percent of the departments in the state.

Data were secured from completed annual vocational agriculture reports and the monthly summer activity reports. The summer programs and total programs of vocational agriculture were rated by the four agricultural education consultants in the Iowa Department of Public Instruction, Des Moines, Iowa. A five point rating scale was used considering a set of criteria for evaluating vocational agriculture departments.

The summer programs in 26 of the 32 part-time departments were rated in the bottom 40 percent, whereas only 3 were rated in the top 40 percent. Over 90 percent of the summer programs rated 3, 4 and 5 were full-time departments.

As the summer program rating increased, day school and adult farmer enrollments also increased. Mean enrollments for departments with a summer program rating in the upper 40 percent were 56 day school and 82 adult farmers, whereas the lower 40 percent had mean enrollments of 42.5 day school and 50 adult farmers.

Twenty-seven (73 percent) of the 37 departments which were rated 5 on the summer program were also rated 5 on the total program. Ten departments (27 percent) which were rated 5 on the summer program dropped to a rating of 4 on total program effectiveness.

Data in Table 3 revealed that of the 37 departments which were rated 1 on summer program effectiveness, 33 (89.2 percent) were also rated 1 on total program effectiveness. Only four (10.8 percent) of the departments which were rated 1 on total program effectiveness were rated 2 on summer program effectiveness. It appeared that summer program effectiveness was a very reliable predictor of total program effectiveness.

An analysis of data in Table 4 indicates that in all contest categories the mean number of contestants nearly doubled as summer program rating increased from 1 to 5.

Over 70 percent of the instructors in programs rated 4 or 5 compared to 28 percent in programs rated 1 or 2 trained 3 or more teams. Of the 24 departments that trained 41 or more students for speaking contests 17 departments had summer programs rated 4 or 5, whereas only 3 programs were rated 1 or 2.

It was noted that only 6 (16.2 percent) of the 37 departments with summer programs rated 5 had 10 or fewer students who entered non-speaking contests, whereas 20 (54.1 percent) of those rated 1 had ten or fewer students who entered.

Only 2 (5.4 percent) of the departments with summer programs rated 5 had no students who received the Iowa Farmer degree in 1969, whereas 28 (75.7 percent) of the departments rated 1 had no Iowa Farmers that year. Over three-fourths (75.7 percent) of the departments with summer programs rated 5 had two or more Iowa Farmer recipients in 1969, whereas only three (8.1 percent) departments with programs rated 1 had multiple recipients.

Over twice as many (1,334) students from departments with summer programs which rated in the top 40 percent compared to those in the bottom 40 percent (651), exhibited at shows. The mean number of students (2.62), who exhibited at the state fair, from departments with a summer program rating of 5 was seven times greater than the mean (.38) number from departments with programs rated 1.

The mean dollars labor income per student increased by over 80 percent when departments with a summer program rated 1 were compared to departments with programs rated 5. The economy of those communities in which the vocational agriculture department had a summer program rated 5, received an average of over $33,000 of new wealth compared to an average of only $13,601 of added wealth to those communities where the vocational agriculture summer program was rated 1.

Departments with highly rated programs conducted at least twice as many instructional field trips and tours as did departments with lower rated programs.

Newspapers published an average of 41.2 articles for departments with summer programs rated in the top 40 percent, whereas an average of only 20.7 news articles from departments with programs rated in the bottom 40 percent were published by newspapers. A similar comparative relationship existed between summer program rating and radio and television programs conducted and speeches given.

The instructors in departments with summer programs rated in the top 40 percent had 12 mean years of experience and 8.4 years of tenure, whereas those in the bottom 20 percent had 9 mean years of experience and 5.9 mean years of tenure.

Positive coefficients of correlation highly significant at the one percent level were found for all 18 variables when compared to the summer program rating.

Instructors who conducted summer programs rated in the top 40 percent traveled 2,556 mean miles during the summer of 1969 and made an average of 185 farm visits, whereas those in the lower 40 percent traveled 1,485 mean miles and made an average of 105 farm visits.

Instructors who conducted summer programs rated in the top 40 percent traveled an average of 7,263 miles and made an average of 377 total farm visits. In contrast, those instructors with programs rated in the bottom 40 percent traveled 4,374 mean miles and made an average of 201 farm visits. These data support the generalization, that the majority of vocational agriculture instructors made about twice as many supervisory visits to farms and businesses annually as they did during the 3 summer months.

The average number of Iowa Farmer degrees awarded per department increased in direct relation to the number of summer farm visits made as follows:

1 to 100 farm visits, 0.74 Iowa Farmers per department;
101 to 200 farm visits, 0.98 Iowa Farmers per department;
201 or more farm visits, 1.48 Iowa Farmers per department.

It was observed from the data in Table 23 that summer school attendance did not significantly affect the number of summer farm visits made. There was also no significance when compared to summer program rating as revealed by data in Table 16. These data support the findings of Koene (20) of Wisconsin. He found that apparently the instructors who attended summer school continued to conduct a vigorous summer program even though several weeks werespent out of the community.

Seventy percent of the teachers with 17 or more years experience as compared to only 20.4 percent of those who had been teaching 1 to 4 years made over 150 farm visits during the summer of 1969. The value of the farm visit became more evident to instructors as they gained teaching experience.

Over 70 percent of the instructors who made less than 300 visits had 1 to 8 years of tenure. It was of interest to note that none of the instructors who made less than 100 visits had 9 or more years of tenure.

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APPENDIX

Vocational Agriculture Departments used for the study

Ackley
Akron
Albert City
Albia
Alburnett
Alden
Algona
Alta
Anamosa
Ankeny
Aplington
Argyle
Armstrong
Atlantic
Audubon
Aurelia
Bedford
Belle Plaine
Belmond
Bennett
Bloomfield
Boone, Rt. #2
Britt
Buffalo Center
Calmar
Centerville
Central City
Chariton
Charles City
Charter Oak
Clarion
Coggon
College Springs
Colo
Columbus Jct.
Corning
Correctionville
Corydon
Cresco
Creston
Decorah, Rt. #3
Delhi
Denison
DeWitt
Dows
Dunkerton
Dysart
Earlham
Eddyville
Edgewood
Eldora
Eldridge
Elgin
Elk Horn
Epworth
Estherville
Everly
Exira
Fairfield
Farmington
Farragut
Forest City
Fredericksburg
Garner
Goose Lake
Grand Jct.
Greenfield
Grinnell
Grundy Center
Hamburg
Hampton
Harlan
Hartley
Hawarden
Hudson
Humboldt
Ida Grove
Indianola
Inwood
Iowa Falls
Jefferson
Jesup
Jewell
Kanawha
Kellerton
Kingsley
Knoxville
Lake City
Lake Mills
Lake Park
Lake View
Lamoni
LaPorte City
Latimer
Laurens
LeGrand
LeMars
Leon
Liberty Center
Lohrville
Lytton
Malvern
Mapleton
Maquoketa
Mason City
Maynard
McCallsburg
Mediapolis
Milford
Mingo
Missouri Valley
Monona
Montezuma
Monticello
Moorhead
Moulton
Mount Ayr
Mount Pleasant
Murray
Nashua
Newell
New Hampton
New Market
New Providence
New Sharon
Newton
Northwood
Oakland
Odebolt
Oelwein
Orange City
Osage
Osceola
Oskaloosa
Packwood
Palmer
Parkersburg
Paullina
Pleasantville
Reinbeck
Rockford
Rockwell City
Royal
Runnells, Rt. #2
Sac City
St. Ansgar
Sheffield
Shelby
Sheldon
Shenandoah
Sibley
Sigourney
Sioux Center
Sloan
Solon
Spencer
Stanton
Stanwood
State Center
Story City
Sully
Sumner
Swea City
Thompson
Van Horne
Ventura
Villisca
Vinton
Wall Lake
Walnut
Wapello
Washington
Waukon
Waverly
Webster City
Wellman
Wellsburg
West Bend
West Branch
West Liberty
West Union
Williamsburg
Wilton Jct.
Winfield
Winterset

370CE-51ES

State of Iowa
DEPARTMENT OF PUBLIC INSTRUCTION
Paul F. Johnston, Superintendent
Vocational Education Branch
Des Moines 50319

Form A-5 Rev. 1969
Due June 30

ANNUAL VOCATIONAL AGRICULTURE REPORT

July 1, 19___ - June 30, 19___

________________________________ (Name of School District)

________________________________ (Address & Zip Code)

A. Instructional Program	All Day	AOEE	YF	AF	Dep't. Total
1. Class enrollment					
2. Supervised practice enrollment . .					
3. Number of class sessions held. . .	XXXXXXX	XXXXXXX			XXXXXXX
4. Hours of instruction completed . .	XXXXXXX	XXXXXXX			XXXXXXX
5. Number of field trips conducted. .					
a. Total attendance.					
6. Number of students with special needs being served					
7. Number on advisory committee . . .					
a. Number of meetings held . . .					
8. Number of banquets conducted . . .					
a. Attendance.					
9. Number of publicity items prepared					
a. Newspaper					
b. Radio and TV.					
c. Magazines, bulletins, etc . .					
d. Speeches					
e. Other media					
10. Number of surveys conducted. . . .					
11. Number of supervisory visits to individual students.					

12. Number of supervisory visits per month:

Jul_____ Aug_____ Sept_____ Oct_____ Nov_____ Dec_____ Jan_____ Feb_____

Mar_____ Apr_____ May _____ June_____

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Leadership Development

	Local	Sub-Distr. or County	District	State	National
1. Number of teams trained and competing:					
a. Livestock judging					
b. Meats identification, judging					
c. Dairy judging					
d. Dairy products judging. . . .					
e. Other (specify)					
2. Number of students exhibiting at shows					
3. Number of students entering FFA contests:					
a. Creed					
b. Chapter Program					
c. Extemporaneous speaking . . .					
d. Parliamentary procedure . . .					
e. Public speaking					
f. Other speaking contests . . .					
g. Secretary's Book.					
h. Treasurer's Book.					
i. Reporter's Book					
4. Number of students entering foundation & other awards:					
a. Star Greenhand.					
b. Star Chapter Farmer					
c. State Farmer.					
d. American Farmer					
e. Agribusiness.					
f. Agricultural Mechanics. . . .					
g. Crop Farming.					
h. Dairy Farming					
i. Livestock Farming					
j. Poultry Farming					
k. Home & Farm Electrification .					
l. Home Improvement.					
m. Placement in Agr. Production.					
n. Soil & Water Management . . .					
o. Farm Safety					
p. Farm Forestry					
r. Natural Resources Development					
s. Ornamental Horticulture . . .					
t. Other (specify)					

5. _________ Number of FFA meetings held past year.

6. _________ Average attendance at regular FFA meetings.

7. _________ Number of active FFA members.

C. Meetings, Trips, Activities

No.	Attendance	
		1. Trips & tours conducted (exclude class field trips)
		2. Meetings conducted by instructor (exclude all day, young farmer, & adult farmer)
		3. Meetings conducted in cooperation with others
		4. Agricultural clinics, seminars, shows conducted
		5. Group conferences
		6. Exhibits prepared and displayed
		7. Other ______________________________

D. Community Services Provided

No. Farmers	Scope	
		1. Livestock selection
		2. Livestock, insect, or disease identification, control, sanitatio
		3. Livestock production testing, milk sampling, testing
		4. Seed selection, germination, cleaning, treating
		5. Plant disease or insect identification control
		6. Orchards, gardens (pruning, spraying, etc.)
		7. Weed identification and control
		8. Soil sampling, testing, fertilizer selection
		9. Soil conservation, erosion control
		10. Farm management, records, credit, etc.
		11. Farm safety
		12. Farmstead planning, electrification, automation
		13. Machinery mgt., selection, adjustment, repair
		14. Demonstration plots
		15. Other ______________________________

E. Administrative Procedures

1. Miles traveled during year in Vo-Ag work

Activity	Personal Car	School Vehicle
In service area		
To called conferences		
Other		
TOTAL		

2. ______________Number of students with supervised practice programs

$______________Total labor income of all-day students

$______________Average labor income of all-day students

Yes No

☐ ☐ 3. Instructor is employed as full time vo-ag instructor

☐ ☐ 4. Departmental files organized - up-to-date

☐ ☐ 5. Ag-dex filing system used

☐ ☐ 6. Records and reports up-to-date

☐ ☐ 7. Departmental program of work, course outlines prepares, used

☐ ☐ 8. Agriculturally related occupations instruction available

☐ ☐ 9. AOEE (Agricultural Occupations Employment Experience) available

______ 10. Number of students placed for AOEE this year

11. List businesses cooperating as employment centers for AOEE______________

____

12. Improvements made in vo-ag department (attach additional material if needed
Building, facilities, & equip.______________________________

____

Instructional program, materials, etc.______________________

____

13. Major activities and accomplishments______________________

____

______________________________ ______________________________
(Signature of Instructor) (Date Signed)

______________________________ ______________________________
(Signature of Superintendent) (Date Signed)

38V-1095VE

FORM A-23 Rev.

DUE: July 10
Aug. 10
Sept. 10

STATE OF IOWA
DEPARTMENT OF PUBLIC INSTRUCTION
VOCATIONAL EDUCATION BRANCH
DES MOINES

VOCATIONAL AGRICULTURE SUMMER ACTIVITY REPORT

Month ______________ (FOR JUNE, JULY AND AUGUST), 19 ____

School ______________________ Instructor ______________________

I. Daily Record (LIST WORK FOR EACH DAY OF MONTH)

DATE	NO. FARM VISITS				PLACE OR PERSON	NATURE OF WORK	MILES TRAVELED
	DAY	AF	YF	OTHER			

Visits ______________________ ☐ TOTAL Visits Total number miles traveled ☐

Enrollment ______________________ ☐ TOTAL Enrollment

CP-45920 5/68

II. SUMMARY OF ACTIVITIES

A. Meetings tours and trips (Indicate whether conducted, cooperated in, attended and number, nature and attendance)

B. Test plots, demonstrations

C. Community service work

D. Prospective enrollment (Indicate whether Day, Young Farmer, Adult Farmer, and number)

E. Organization of annual plans, courses, equipment, rooms, library

F. Professional improvement

G. Publicity, communications and individual conferences

H. F.F.A. activities

I. Other undertakings

III. OUTLINE OF PLANS FOR FOLLOWING MONTH

Signed ______________________ INSTRUCTOR ______________________ SUPERINTENDENT OR BOARD MEMBER

Date ______________________ ______________________

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